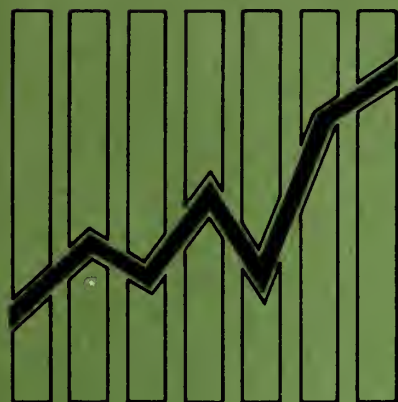


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**New Structures
and Equipment
by Using Industries, 1972:
Detailed Estimates
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Bureau of Economic Analysis Staff Paper

U.S. DEPARTMENT OF COMMERCE
Bureau of Economic Analysis

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by
**Peter E. Coughlin
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**SEPTEMBER
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U.S. DEPARTMENT OF COMMERCE

Philip M. Klutznick, Secretary

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BUREAU OF ECONOMIC ANALYSIS

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PREFACE

The detailed 1972 capital flow study was prepared under the general direction of Philip M. Ritz, Chief of the Interindustry Economics Division. Albert J. Walderhaug, Chief of the Research and Analysis Branch, supervised the study. David R. Nelson, Robert S. Robinowitz, and George M. Swisko prepared the initial distributions of capital goods items to using industries. Irving Stern prepared the estimates of total expenditures for structures and for equipment by industry. Peter E. Coughlin coordinated the study, produced the final estimates, and prepared the report jointly with Albert J. Walderhaug. Philip M. Ritz made important contributions to the final editing and layout of the study. Howard L. Schreier advised on the computer work.

Peggy L. Burcham provided all the typing assistance at the several stages of preparation, including final camera-ready copy.

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New Structures and Equipment by Using Industries, 1972:
Detailed Estimates and Methodology

A capital flow table (CFT) distributes the value of investment in every type of structure and equipment among the industries acquiring that type of capital. This report presents the CFT for 1972 at the 150-commodity and 76-industry level of detail. A summary table was published in the July 1980 *Survey of Current Business*.

The CFT is presented in the first part of this report. The commodity classification for structures and equipment is in six-digit input-output (I-O) detail, matching the 496-order classification of the current account I-O study of the U.S. economy for 1972. This classification appears as table 1. The detail for using industries remains at the two-digit level, the same as in the *Survey* article. The sources and procedures used to compile the estimates are described in the second part of the report. The appendixes show: the full commodity detail in which the estimates were made; a reconciliation of the published detail for 1972 for gross private domestic fixed investment (GPDFI) in the national income and product accounts (NIPA's) with GPDFI in the I-O use tables and in the CFT; a discussion of the comparability of the 1972 and the 1967 CFT's; 1/ and a description of a magnetic tape containing more detailed CFT estimates than are shown here. 2/

I. *New structures and equipment by using industries, 1972:*
150 commodities by 76 industries

The CFT expands the commodity detail in the GPDFI column of the I-O use table to show the industries acquiring the capital commodities for their own use. 3/ In table 2, the rows show the distribution of new capital goods to using industries, and the columns show the composition of capital goods acquired by using industries. The detail in table 2 is based on the six-digit I-O classification scheme for the capital goods commodities and the two-digit I-O industry classification scheme for using industries. Table 2 contains 150 six-digit I-O commodity groups (rows) and 76 two-digit I-O using industries (columns). In table 1, "Commodity and Industry Classification for the 1972 Capital Flow Table," the commodity groups containing one or more capital goods are indicated with asterisks preceding the six-digit commodity code. The data entering table 2 have been aggregated from the full capital flow table, available only on tape, which contains 606 commodities. Detail of the 606 commodities is shown in

- 1/ A similar report for 1967, *Interindustry Transactions in New Structures and Equipment, 1963 and 1967*; Volume I, "Tables with Additional Capital Good Producing Industry Detail;" Volume II, "Methods and Sources for 1967," BEA 1975, is available from the National Technical Information Service, Springfield, VA 22161, at \$7.00 for Volume I and \$9.00 for Volume II; each is available in microfiche for \$3.50.
- 2/ Computer printouts and magnetic tapes of the detailed estimates are available for purchase. The printouts for the CFT in purchasers' values contain 606 capital items (rows) and 76 industries (columns). The tape contains the corresponding margins. The tape has indicators for the degree of reliability of the estimating procedures used for each product-by-industry cell. The printout costs \$75.00 and the computer tape costs \$200.00. Inquiries should be directed to the Interindustry Economics Division, BEA (BE-51).
- 3/ The relationships between the CFT, the conventional I-O use table, and the GNP accounts are illustrated in the July 1980 *Survey* article cited above.

Table 1.--Commodity and Industry Classification for the 1972 Capital Flow Table

Commodity or industry number and title	Related Census- SIC codes (1972 edition)	Commodity or industry number and title	Related Census- SIC codes (1972 edition)
AGRICULTURE, FORESTRY, AND FISHERIES			
#1 Livestock and livestock products			
1.0100 Dairy farm products.....	0241, pt. 0191, pt. 0259, pt. 0291	*11.0106 New hotels and motels.....	pt. 15-17
1.0200 Poultry and eggs.....	025 (excl. 0254 and pt. 0259), pt. 0191, pt. 0219, pt. 0291	*11.0107 New dormitories.....	pt. 15, pt. 17
1.0301 Meat animals.....	021 (excl. pt. 0219), pt. 0191, pt. 0259, pt. 0291	*11.0201 New industrial buildings.....	pt. 15-17
1.0302 Miscellaneous livestock.....	027, pt. 0191, pt. 0219 pt. 0259, pt. 0291	*11.0202 New office buildings.....	pt. 15, pt. 17
#2 Other agricultural products			
2.0100 Cotton.....	0131, pt. 0191, pt. 0219, pt. 0259, pt. 0291	*11.0203 New warehouses.....	pt. 15, pt. 17
2.0201 Food grains.....	pt. 011, pt. 0191, pt. 0219, pt. 0259, pt. 0291	*11.0204 New garages and service stations.....	pt. 15, pt. 17
2.0202 Feed grains.....	pt. 011, pt. 0139, pt. 0191, pt. 0219, pt. 0259, pt. 0291	*11.0205 New stores and restaurants.....	pt. 15, pt. 17
2.0203 Grass seeds.....	pt. 0139, pt. 0191, pt. 0219, pt. 0259, pt. 0291	*11.0206 New religious buildings.....	pt. 15, pt. 17
2.0300 Tobacco.....	0132, pt. 0191, pt. 0219, pt. 0259, pt. 0291	*11.0207 New educational buildings.....	pt. 15, pt. 17
2.0401 Fruits.....	pt. 017, pt. 0191, pt. 0219, pt. 0259, pt. 0291	*11.0208 New hospital and institutional buildings.....	pt. 15, pt. 17
2.0402 Tree nuts.....	0173, pt. 0179, pt. 0191, pt. 0219, pt. 0259, pt. 0291	*11.0209 New other nonfarm buildings.....	pt. 15, pt. 17
2.0501 Vegetables.....	0134, 0161, pt. 0119, pt. 0139, pt. 0191, pt. 0219, pt. 0259, pt. 0291	*11.0301 New telephone and telegraph facilities.....	pt. 16, pt. 17
2.0502 Sugar crops.....	0133, pt. 0191, pt. 0219, pt. 0259, pt. 0291	*11.0302 New railroads.....	pt. 16, pt. 17
2.0503 Miscellaneous crops.....	pt. 0119, pt. 0139, pt. 0191, pt. 0219, pt. 0259, pt. 0291	*11.0303 New electric utility facilities.....	pt. 16, pt. 17
2.0600 Oil bearing crops.....	0116, pt. 0119, pt. 013, pt. 0173, pt. 0219, pt. 0259, pt. 0291	*11.0304 New gas utility facilities.....	pt. 16, pt. 17
2.0701 Forest products.....	pt. 018, pt. 0191, pt. 0219, pt. 0259, pt. 0291	*11.0305 New petroleum pipelines.....	pt. 16, pt. 17
2.0702 Greenhouse and nursery products.....	pt. 018, pt. 0191, pt. 0219, pt. 0259, pt. 0291	*11.0306 New water supply facilities.....	pt. 16, pt. 17
#3 Forestry and fishery products			
3.0000 Forestry and fishery products.....	081-4, 091, 097	*11.0307 New sewer system facilities.....	pt. 16, pt. 17
#4 Agricultural, forestry, and fishery services			
4.0000 Agricultural, forestry, and fishery services.....	0254, 07 (excl. 074), 085, 092	*11.0308 New local transit facilities.....	pt. 16, pt. 17
MINING			
#5 Iron and ferroalloy ores mining			
5.0000 Iron and ferroalloy ores mining.....	101, 106	*11.0400 New highways and streets.....	pt. 16, pt. 17
#6 Nonferrous metal ores mining			
6.0100 Copper ore mining.....	102	*11.0501 New farm housing units and additions and alterations.....	pt. 15, pt. 17
*6.0200 Nonferrous metal ores mining, except copper.....	103-5, pt. 108, 109	*11.0502 New farm service facilities.....	pt. 15, pt. 17
#7 Coal mining			
7.0000 Coal mining.....	1111, pt. 1112, 1211, pt. 1213	*11.0503 New petroleum and natural gas well drilling.....	pt. 138
#8 Crude petroleum and natural gas			
*8.0000 Crude petroleum and natural gas.....	131, 132, pt. 138	*11.0504 New petroleum, natural gas, and solid mineral exploration.....	pt. 108, pt. 1112, pt. 1213, pt. 138, pt. 148
#9 Stone and clay mining and quarrying			
9.0000 Stone and clay mining and quarrying.....	141-5, pt. 148, 149	11.0505 New military facilities.....	pt. 15-17
#10 Chemical and fertilizer mineral mining			
10.0000 Chemical and fertilizer mineral mining.....	147	11.0506 New conservation and development facilities.....	pt. 15-17
CONSTRUCTION			
#11 New construction			
*11.0101 New residential 1-unit structures, nonfarm.....	pt. 15, pt. 17	*11.0507 Other new nonbuilding facilities.....	pt. 15-17
*11.0102 New residential 2-4 unit structures, nonfarm.....	pt. 15, pt. 17	*11.0508 New access structures for solid mineral development.....	pt. 108, pt. 1112, pt. 1213, pt. 148
*11.0103 New residential garden apartments.....	pt. 15-17	#12 Maintenance and repair construction	
*11.0104 New residential high-rise apartments.....	pt. 15-17	12.0100 Maintenance and repair, residential.....	pt. 15, pt. 17
*11.0105 New residential additions and alterations, nonfarm.....	pt. 15, pt. 17	12.0201 Maintenance and repair of other nonfarm buildings.....	pt. 15, pt. 17
		12.0202 Maintenance and repair of farm residential buildings.....	pt. 15, pt. 17
		12.0203 Maintenance and repair of farm service facilities.....	pt. 15, pt. 17
		12.0204 Maintenance and repair of telephone and telegraph facilities.....	pt. 16, pt. 17
		12.0205 Maintenance and repair of railroads.....	pt. 16, pt. 17
		12.0206 Maintenance and repair of electric utility facilities.....	pt. 16, pt. 17
		12.0207 Maintenance and repair of gas utility facilities.....	pt. 16, pt. 17
		12.0208 Maintenance and repair of petroleum pipelines.....	pt. 16, pt. 17
		12.0209 Maintenance and repair of water supply facilities.....	pt. 16, pt. 17
		12.0210 Maintenance and repair of sewer facilities.....	pt. 16, pt. 17
		12.0211 Maintenance and repair of local transit facilities.....	pt. 16, pt. 17
		12.0212 Maintenance and repair of military facilities.....	pt. 16, pt. 17
		12.0213 Maintenance and repair of conservation and development facilities.....	pt. 15-17
		12.0214 Maintenance and repair of highways and streets.....	pt. 16, pt. 17
		12.0215 Maintenance and repair of petroleum and natural gas wells.....	pt. 138
		12.0216 Maintenance and repair of other nonbuilding facilities.....	pt. 15-17
		MANUFACTURING	
		#13 Ordnance and accessories	
		*13.0100 Complete guided missiles.....	3761
		13.0200 Ammunition, except for small arms, n.e.c.....	3483
		13.0300 Tanks and tank components.....	3795
		13.0500 Small arms.....	3484
		13.0600 Small arms ammunition.....	3482
		*13.0700 Other ordnance and accessories.....	3489
		#14 Food and kindred products	
		14.0101 Meat packing plants.....	2011
		14.0102 Sausages and other prepared meats.....	2013
		14.0103 Poultry dressing plants.....	2016
		14.0104 Poultry and egg processing.....	2017
		14.0200 Creamery butter.....	2021
		14.0300 Cheese, natural and processed.....	2022
		14.0400 Condensed and evaporated milk.....	2023
		14.0500 Ice cream and frozen desserts.....	2024
		14.0600 Fluid milk.....	2026
		14.0700 Canned and cured sea foods.....	2091
		14.0800 Canned specialties.....	2032
		14.0900 Canned fruits and vegetables.....	2033
		14.1000 Dehydrated food products.....	2034
		14.1100 Pickles, sauces, and salad dressings.....	2035
		14.1200 Fresh or frozen packaged fish.....	2092
		14.1300 Frozen fruits and vegetables.....	2037-8
		14.1401 Flour and other grain mill products.....	2041
		14.1402 Cereal preparations.....	2043
		14.1403 Blended and prepared flour.....	2045
		14.1501 Dog, cat, and other pet food.....	2047
		14.1502 Prepared feeds, n.e.c.....	2048
		14.1600 Rice milling.....	2044
		14.1700 Wet corn milling.....	2046
		14.1801 Bread, cake, and related products.....	2051
		14.1802 Cookies and crackers.....	2052
		14.1900 Sugar.....	2061-3
		14.2001 Confectionery products.....	2065
		14.2002 Chocolate and cocoa products.....	2066
		14.2003 Chewing gum.....	2067
		14.2101 Malt liquors.....	2082
		14.2102 Malt.....	2083
		14.2103 Wines, brandy, and brandy spirits.....	2084
		14.2104 Distilled liquor, except brandy.....	2085
		14.2200 Bottled and canned soft drinks.....	2086
		14.2300 Flavoring extracts and sirups, n.e.c.....	2087
		14.2400 Cottonseed oil mills.....	2074
		14.2500 Soybean oil mills.....	2075

See notes at end of table.

Table 1.-Commodity and Industry Classification for the 1972 Capital Flow Table
- continued -

Commodity or industry number and title	Related Census- SIC codes (1972 edition)	Commodity or industry number and title	Related Census- SIC codes (1972 edition)
14.2600 Vegetable oil mills, n.e.c.	2076	#26 Printing and publishing	
14.2700 Animal and marine fats and oils	2077	26.0100 Newspapers	271
14.2800 Roasted coffee	2095	26.0200 Periodicals	272
14.2900 Shortening and cooking oils	2079	26.0301 Book publishing	2731
14.3000 Manufactured ice	2097	26.0302 Book printing	2732
14.3100 Macaroni and spaghetti	2098	26.0400 Miscellaneous publishing	274
14.3200 Food preparations, n.e.c.	2099	26.0501 Commercial printing	2751-2, 2754
#15 Tobacco manufactures		26.0502 Lithographic platemaking and services	2795
15.0101 Cigarettes	211	26.0601 Manifold business forms	276
15.0102 Cigars	212	26.0602 Blankbooks and looseleaf binders	2782
15.0103 Chewing and smoking tobacco	213	26.0700 Greeting card publishing	277
15.0200 Tobacco stemming and redrying	214	26.0801 Engraving and plate printing	2753
#16 Broad and narrow fabrics, yarn and thread mills		26.0802 Bookbinding and related work	2789
16.0100 Broadwoven fabric mills and fabric finishing plants	221-3, 2261-2	26.0803 Typesetting	2791
16.0200 Narrow fabric mills	224	26.0804 Photoengraving	2793
16.0300 Yarn mills and finishing of textiles, n.e.c.	2269, 2281-3	26.0805 Electrotyping and stereotyping	2794
16.0400 Thread mills	2284	#27 Chemicals and selected chemical products	
#17 Miscellaneous textile goods and floor coverings		* 27.0100 Industrial inorganic and organic chemicals	281 (excl. 28195), 2865, 2869
* 17.0100 Floor coverings	227	27.0201 Nitrogenous and phosphatic fertilizers	2873-4
* 17.0200 Felt goods, n.e.c.	2291	27.0202 Fertilizers, mixing only	2875
17.0300 Lace goods	2292	27.0300 Agricultural chemicals, n.e.c.	2879
17.0400 Padding and upholstery filling	2293	27.0401 Gum and wood chemicals	2861
17.0500 Processed textile waste	2294	27.0402 Adhesives and sealants	2891
17.0600 Coated fabrics, not rubberized	2295	27.0403 Explosives	2892
17.0700 Tire cord and fabric	2296	27.0404 Printing ink	2893
17.0900 Cordage and twine	2298	27.0405 Carbon black	2895
17.1001 Nonwoven fabrics	2297	27.0406 Chemical preparations, n.e.c.	2899
17.1002 Textile goods, n.e.c.	2299	#28 Plastics and synthetic materials	
#18 Apparel		28.0100 Plastics materials and resins	2821
18.0101 Women's hosiery, except socks	2251	28.0200 Synthetic rubber	2822
18.0102 Hosiery, n.e.c.	2252	28.0300 Cellulosic man-made fibers	2823
18.0201 Knit outerwear mills	2253	28.0400 Organic fibers, noncellulosic	2824
18.0202 Knit underwear mills	2254	#29 Drugs, cleaning and toilet preparations	
18.0203 Knitting mills, n.e.c.	2259	29.0100 Drugs	283
18.0300 Knit fabric mills	2257-8	29.0201 Soap and other detergents	2841
18.0400 Apparel made from purchased materials	231-8, 39996	29.0202 Polishes and sanitation goods	2842
#19 Miscellaneous fabricated textile products		29.0203 Surface active agents	2843
19.0100 Curtains and draperies	2391	29.0300 Toilet preparations	2844
19.0200 Housefurnishings, n.e.c.	2392	#30 Paints and allied products	
19.0301 Textile bags	2393	30.0000 Paints and allied products	285
19.0302 Canvas products	2394	#31 Petroleum refining and related industries	
19.0303 Pleating and stitching	2395	31.0100 Petroleum refining and miscellaneous products of petroleum and coal	291, 299
19.0304 Automotive and apparel trimmings	2396	31.0200 Paving mixtures and blocks	2951
19.0305 Schiffl machine embroideries	2397	31.0300 Asphalt felts and coatings	2952
19.0306 Fabricated textile products, n.e.c.	2399	#32 Rubber and miscellaneous plastics products	
#20 Lumber and wood products, except containers		32.0100 Tires and inner tubes	301
20.0100 Logging camps and logging contractors	2411	32.0200 Rubber and plastics footwear	302
20.0200 Sawmills and planing mills, general	2421	32.0301 Reclaimed rubber	303
20.0300 Hardwood dimension and flooring mills	2426	* 32.0302 Fabricated rubber products, n.e.c.	306
20.0400 Special product sawmills, n.e.c.	2429	* 32.0400 Miscellaneous plastics products	307
20.0501 Millwork	2431	32.0500 Rubber and plastics hose and belting	304
20.0502 Wood kitchen cabinets	2434	#33 Leather tanning and finishing	
20.0600 Veneer and plywood	2435-6	33.0001 Leather tanning and finishing	311
20.0701 Structural wood members, n.e.c.	2439	#34 Footwear and other leather products	
20.0702 Prefabricated wood buildings	2452	34.0100 Footwear cut stock	313
20.0800 Wood preserving	2491	34.0201 Shoes, except rubber	3143-4, 3149
20.0901 Wood pallets and skids	2448	34.0202 House slippers	3142
20.0902 Particleboard	2492	34.0301 Leather gloves and mittens	315
* 20.0903 Wood products, n.e.c.	2499	34.0302 Luggage	316
#21 Wood containers		34.0303 Women's handbags and purses	3171
21.0000 Wood containers	2441, 2449	34.0304 Personal leather goods	3172
#22 Household furniture		34.0305 Leather goods, n.e.c.	319
* 22.0101 Wood household furniture	2511	#35 Glass and glass products	
* 22.0102 Household furniture, n.e.c.	2519	35.0100 Glass and glass products, except containers	321, 3229, 323
* 22.0103 Wood TV and radio cabinets	2517	35.0200 Glass containers	3221
* 22.0200 Upholstered household furniture	2512	#36 Stone and clay products	
* 22.0300 Metal household furniture	2514	36.0100 Cement, hydraulic	324
* 22.0400 Mattresses and bedsprings	2515	36.0200 Brick and structural clay tile	3251
#23 Other furniture and fixtures		36.0300 Ceramic wall and floor tile	3253
* 23.0100 Wood office furniture	2521	36.0400 Clay refractories	3255
* 23.0200 Metal office furniture	2522	36.0500 Structural clay products, n.e.c.	3259
* 23.0300 Public building furniture	2531	36.0600 Vitreous plumbing fixtures	3261
* 23.0400 Wood partitions and fixtures	2541	36.0701 Vitreous china food utensils	3262
* 23.0500 Metal partitions and fixtures	2542	36.0702 Fine earthenware food utensils	3263
* 23.0600 Blinds, shades, and drapery hardware	2591	36.0800 Porcelain electrical supplies	3264
* 23.0700 Furniture and fixtures, n.e.c.	2599	36.0900 Pottery products, n.e.c.	3269
#24 Paper and allied products, except containers and boxes		36.1000 Concrete block and brick	3271
24.0100 Pulp mills	261	36.1100 Concrete products, n.e.c.	3272
24.0200 Paper mills, except building paper	262	36.1200 Ready-mixed concrete	3273
24.0300 Paperboard mills	263	36.1300 Lime	3274
24.0400 Envelopes	2642	36.1400 Gypsum products	3275
24.0500 Sanitary paper products	2647	36.1500 Cut stone and stone products	328
24.0602 Building paper and board mills	266	36.1600 Abrasive products	3291
24.0701 Paper coating and glazing	2641	36.1700 Asbestos products	3292
24.0702 Bags, except textile	2643	36.1800 Gaskets, packing and sealing devices	3293
24.0703 Die-cut paper and board	2645	36.1900 Minerals, ground or treated	3295
24.0704 Pressed and molded pulp goods	2646	36.2000 Mineral wool	3296
24.0705 Stationery products	2648	36.2100 Nonclay refractories	3297
24.0706 Converted paper products, n.e.c.	2649	36.2200 Nonmetallic mineral products, n.e.c.	3299
#25 Paperboard containers and boxes		#37 Primary iron and steel manufacturing	
25.0000 Paperboard containers and boxes	265	37.0101 Blast furnaces and steel mills	3312
		37.0102 Electrometallurgical products	3313

See notes at end of table.

Table 1.--Commodity and Industry Classification for the 1972 Capital Flow Table
- continued -

Commodity or industry number and title	Related Census- SIC codes (1972 edition)	Commodity or industry number and title	Related Census- SIC codes (1972 edition)
37.0103 Steel wire and related products.....	3315	#50 Miscellaneous machinery, except electrical	
37.0104 Cold finishing of steel shapes.....	3316	50.0001 Carburetors, pistons, rings, valves.....	3592
37.0105 Steel pipe and tubes.....	3317	* 50.0002 Machinery, except electrical, n.e.c.....	3599
37.0200 Iron and steel foundries.....	332	#51 Office, computing, and accounting machines	
37.0300 Iron and steel forgings.....	3462	* 51.0101 Electronic computing equipment.....	3573
37.0401 Metal heat treating.....	3398	* 51.0102 Calculating and accounting machines.....	3574
* 37.0402 Primary metal products, n.e.c.....	3399	* 51.0200 Typewriters.....	3572
#38 Primary nonferrous metals manufacturing		* 51.0300 Scales and balances.....	3576
38.0100 Primary copper.....	3331	* 51.0400 Office machines, n.e.c.....	3579
38.0200 Primary lead.....	3332	#52 Service industry machines	
38.0300 Primary zinc.....	3333	* 52.0100 Automatic merchandising machines.....	3581
38.0400 Primary aluminum.....	3334, 28195	* 52.0200 Commercial laundry equipment.....	3582
38.0500 Primary nonferrous metals, n.e.c.....	3339	* 52.0300 Refrigeration and heating equipment.....	3585
38.0600 Secondary nonferrous metals.....	334	* 52.0400 Measuring and dispensing pumps.....	3586
38.0700 Copper rolling and drawing.....	3351	* 52.0500 Service industry machines, n.e.c.....	3589
38.0800 Aluminum rolling and drawing.....	3353-5	#53 Electric transmission and distribution equipment and industrial apparatus	
38.0900 Nonferrous rolling and drawing, n.e.c.....	3356	* 53.0100 Instruments to measure electricity.....	3825
* 38.1000 Nonferrous wire drawing and insulating.....	3357	* 53.0200 Transformers.....	3612
38.1100 Aluminum castings.....	3361	* 53.0300 Switchgear and switchboard apparatus.....	3613
38.1200 Brass, bronze, and copper castings.....	3362	* 53.0400 Motors and generators.....	3621
38.1300 Nonferrous castings, n.e.c.....	3369	* 53.0500 Industrial controls.....	3622
38.1400 Nonferrous forgings.....	3463	* 53.0600 Welding apparatus, electric.....	3623
#39 Metal containers		* 53.0700 Carbon and graphite products.....	3624
39.0100 Metal cans.....	3411	* 53.0800 Electrical industrial apparatus, n.e.c.....	3629
* 39.0200 Metal barrels, drums, and pails.....	3412	#54 Household appliances	
#40 Heating, plumbing, and fabricated structural metal products		* 54.0100 Household cooking equipment.....	3631
40.0100 Metal sanitary ware.....	3431	* 54.0200 Household refrigerators and freezers.....	3632
40.0200 Plumbing fixture fittings and trim.....	3432	* 54.0300 Household laundry equipment.....	3633
40.0300 Heating equipment, except electric.....	3433	* 54.0400 Electric housewares and fans.....	3634
40.0400 Fabricated structural metal.....	3441	* 54.0500 Household vacuum cleaners.....	3635
40.0500 Metal doors, sash, and trim.....	3442	* 54.0600 Sewing machines.....	3636
* 40.0600 Fabricated plate work (boiler shops).....	3443	* 54.0700 Household appliances, n.e.c.....	3639
* 40.0700 Sheet metal work.....	3444	#55 Electric lighting and wiring equipment	
40.0800 Architectural metal work.....	3446	55.0100 Electric lamps.....	3641
40.0901 Prefabricated metal buildings.....	3448	* 55.0200 Lighting fixtures and equipment.....	3645-8
40.0902 Miscellaneous metal work.....	3449	* 55.0300 Wiring devices.....	3643-4
#41 Screw machine products and stampings		#56 Radio, TV, and communication equipment	
41.0100 Screw machine products and bolts, nuts, rivets, and washers.....	345	* 56.0100 Radio and TV receiving sets.....	3651
41.0201 Automotive stampings.....	3465	56.0200 Phonograph records and tape.....	3652
41.0202 Crowns and closures.....	3466	* 56.0300 Telephone and telegraph apparatus.....	3661
41.0203 Metal stampings, n.e.c.....	3469	* 56.0400 Radio and TV communication equipment.....	3662
#42 Other fabricated metal products		#57 Electronic components and accessories	
42.0100 Cutlery.....	3421	57.0100 Electron tubes.....	3671-3
42.0201 Hand and edge tools, n.e.c.....	3423	57.0200 Semiconductors and related devices.....	3674
* 42.0202 Hand saws and saw blades.....	3425	* 57.0300 Electronic components, n.e.c.....	3675-9
42.0300 Hardware, n.e.c.....	3429	#58 Miscellaneous electrical machinery, equipment, and supplies	
42.0401 Plating and polishing.....	3471	* 58.0100 Storage batteries.....	3691
42.0402 Metal coating and allied services.....	3479	58.0200 Primary batteries, dry and wet.....	3692
42.0500 Miscellaneous fabricated wire products.....	3495-6	* 58.0300 X-ray apparatus and tubes.....	3693
42.0700 Steel springs, except wire.....	3493	58.0400 Engine electrical equipment.....	3694
* 42.0800 Pipe, valves, and pipe fittings.....	3494, 3498	58.0500 Electrical equipment, n.e.c.....	3699
42.1000 Metal foil and leaf.....	3497	#59 Motor vehicles and equipment	
* 42.1100 Fabricated metal products, n.e.c.....	3499	* 59.0100 Truck and bus bodies.....	3713
#43 Engines and turbines		* 59.0200 Truck trailers.....	3715
* 43.0100 Steam engines and turbines.....	3511	* 59.0301 Motor vehicles.....	3711
* 43.0200 Internal combustion engines, n.e.c.....	3519	59.0302 Motor vehicle parts and accessories.....	3714
#44 Farm and garden machinery		#60 Aircraft and parts	
* 44.0001 Farm machinery and equipment.....	3523	* 60.0100 Aircraft.....	3721
* 44.0002 Lawn and garden equipment.....	3524	* 60.0200 Aircraft and missile engines and engine parts.....	3724, 3764
#45 Construction and mining machinery		60.0400 Aircraft and missile equipment, n.e.c.....	3728, 3769
* 45.0100 Construction machinery and equipment.....	3531	#61 Other transportation equipment	
* 45.0200 Mining machinery, except oilfield.....	3532	* 61.0100 Ship building and repairing.....	3731
* 45.0300 Oilfield machinery.....	3533	* 61.0200 Boat building and repairing.....	3732
#46 Materials handling machinery and equipment		* 61.0300 Railroad equipment.....	374
46.0100 Elevators and moving stairways.....	3534	* 61.0500 Motorcycles, bicycles, and parts.....	375
* 46.0200 Conveyors and conveying equipment.....	3535	* 61.0601 Travel trailers and campers.....	3792
* 46.0300 Hoists, cranes, and monorails.....	3536	* 61.0602 Mobile homes.....	2451
* 46.0400 Industrial trucks and tractors.....	3537	* 61.0700 Transportation equipment, n.e.c.....	3799
#47 Metalworking machinery and equipment		#62 Professional, scientific, and controlling instruments and supplies	
* 47.0100 Machine tools, metal cutting types.....	3541	* 62.0100 Engineering and scientific instruments.....	3811
* 47.0200 Machine tools, metal forming types.....	3542	* 62.0200 Mechanical measuring devices.....	3823-4, 3829
* 47.0300 Special dies and tools and machine tool accessories.....	3544-5	62.0300 Automatic temperature controls.....	3822
* 47.0401 Power driven hand tools.....	3546	* 62.0400 Surgical and medical instruments.....	3841
* 47.0402 Rolling mill machinery.....	3547	* 62.0500 Surgical appliances and supplies.....	3842
* 47.0403 Metalworking machinery, n.e.c.....	3549	* 62.0600 Dental equipment and supplies.....	3843
#48 Special industry machinery and equipment		* 62.0700 Watches, clocks, and parts.....	387
* 48.0100 Food products machinery.....	3551	#63 Optical, ophthalmic, and photographic equipment and supplies	
* 48.0200 Textile machinery.....	3552	* 63.0100 Optical instruments and lenses.....	383
* 48.0300 Woodworking machinery.....	3553	63.0200 Ophthalmic goods.....	385
* 48.0400 Paper industries machinery.....	3554	* 63.0300 Photographic equipment and supplies.....	386
* 48.0500 Printing trades machinery.....	3555	#64 Miscellaneous manufacturing	
* 48.0600 Special industry machinery, n.e.c.....	3559	64.0101 Jewelry, precious metal.....	3911
#49 General industrial machinery and equipment		64.0102 Jewelers materials and lapidary work.....	3915
* 49.0100 Pumps and compressors.....	3561, 3563	64.0104 Silverware and plated ware.....	3914
* 49.0200 Ball and roller bearings.....	3562	64.0105 Costume jewelry.....	3961
* 49.0300 Blowers and fans.....	3564	* 64.0200 Musical instruments.....	393
49.0400 Industrial patterns.....	3565	64.0301 Games, toys, and children's vehicles.....	3944
49.0500 Power transmission equipment.....	3566, 3568	64.0302 Dolls.....	3942
* 49.0600 Industrial furnaces and ovens.....	3567		
* 49.0700 General industrial machinery, n.e.c.....	3569		

See notes at end of table.

Table 1.--Commodity and Industry Classification for the 1972 Capital Flow Table
- continued -

Commodity or industry number and title	Related Census- SIC codes (1972 edition)	Commodity or industry number and title	Related Census- SIC codes (1972 edition)
*64.0400 Sporting and athletic goods, n.e.c.	3949	77.0400 Educational services	82
64.0501 Pens and mechanical pencils	3951	77.0500 Nonprofit organizations	84, 86, 8922
64.0502 Lead pencils and art goods	3952	77.0600 Job training and related services	8331
64.0503 Marking devices	3953	77.0700 Child day care services	8351
64.0504 Carbon paper and inked ribbons	3955	77.0800 Residential care	8361
64.0600 Artificial trees and flowers	3962	77.0900 Social services, n.e.c.	8321, 8399
64.0701 Buttons	3963		
64.0702 Needles, pins, and fasteners	3964	GOVERNMENT ENTERPRISES	
64.0800 Brooms and brushes	3991	78 Federal Government enterprises	
64.0900 Hard surface floor coverings	3996	78.0100 U.S. Postal Service	4311
64.1000 Burial caskets and vaults	3995	78.0200 Federal electric utilities	pt. 491
*64.1100 Signs and advertising displays	3993	78.0300 Commodity Credit Corporation	pt. 613
*64.1200 Manufacturing industries, n.e.c.	3999 (excl. 39996)	78.0400 Other Federal Government enterprises	several ¹
TRANSPORTATION, COMMUNICATION, AND UTILITIES			
#65 Transportation and warehousing ^{1/}		79 State and local government enterprises	
*65.0100 Railroads and related services	40, 474, pt. 4789	79.0100 Local government passenger transit	pt. 41
65.0200 Local, suburban, and interurban highway passenger transportation	41	79.0200 State and local electric utilities	pt. 491
*65.0300 Motor freight transportation and warehousing	42, pt. 4789	79.0300 Other State and local government enterprises	several
*65.0400 Water transportation	44		
*65.0500 Air transportation	45	DUMMY AND SPECIAL INDUSTRIES	
65.0600 Pipe lines, except natural gas	46	80 Noncomparable imports	
65.0700 Transportation services	47 (excl. 474 and pt. 4789)	*80.0000 Noncomparable imports	
#66 Communications, except radio and TV		81 Scrap, used, and secondhand goods	
*66.0000 Communications, except radio and TV	48 (excl. 483)	81.0000 Scrap, used, and secondhand goods	
#67 Radio and TV broadcasting		82 Government industry	
67.0000 Radio and TV broadcasting	483	82.0000 Government industry	
#68 Electric, gas, water, and sanitary services ^{1/}		83 Rest of the world industry	
68.0100 Electric services (utilities)	491, pt. 493	83.0000 Rest of the world industry	
68.0200 Gas production and distribution (utilities)	492, pt. 493	84 Household industry	
68.0300 Water supply and sanitary services	494-7, pt. 493	84.0000 Household industry	
WHOLESALE AND RETAIL TRADE		85 Inventory valuation adjustment	
#69 Wholesale and retail trade		85.0000 Inventory valuation adjustment	
*69.0100 Wholesale trade	50, 51 (excl. manufacturers' sales offices)	VALUE ADDED AND FINAL DEMAND	
*69.0200 Retail trade	52-7, 59, 7396, 8042	V.A. Value added, total	
FINANCE, INSURANCE, AND REAL ESTATE		88 Employee compensation	
#70 Finance and insurance ^{1/}		89 Indirect business taxes	
70.0100 Banking	60	90 Property-type income	
70.0200 Credit agencies	61 (excl. pt. 613), 67		
70.0300 Security and commodity brokers	62	91 Personal consumption expenditures	
70.0400 Insurance carriers	63	91.0000 Personal consumption expenditures	
70.0500 Insurance agents and brokers	64	92 Gross private domestic fixed investment	
#71 Real estate and rental		92.0000 Gross private domestic fixed investment	
71.0100 Owner-occupied dwellings	not applicable	93 Change in business inventories	
*71.0200 Real estate	65-6, pt. 1531	93.0000 Change in business inventories	
SERVICES		94 Exports	
#72 Hotels and lodging, personal and repair services (except auto)		94.0000 Exports	
72.0100 Hotels and lodging places	70 (excl. dining)	95 Imports	
*72.0200 Personal and repair services, except auto repair and beauty and barber shops	72 (excl. 723-4), 762-4, pt. 7699	95.0000 Imports	
72.0300 Beauty and barber shops	723-4	96 Federal Government purchases, national defense	
#73 Business services		96.0000 Federal Government purchases, national defense	
73.0100 Miscellaneous business services	732-9 (excl. 7396)	97 Federal Government purchases, nondefense	
73.0200 Advertising	7692, 7694, pt. 7699	97.0000 Federal Government purchases, nondefense	
73.0300 Miscellaneous professional services	731	98 State and local government purchases, education	
#74 Eating and drinking places	81, 89 (excl. 8922)	98.0000 State and local government purchases, education	
74.0000 Eating and drinking places	58, pt. 70	99 State and local government purchases, other	
#75 Automobile repair and services		99.1000 State and local government purchases, health, welfare, and sanitation	
75.0000 Automobile repair and services	75	99.2000 State and local government purchases, safety	
#76 Amusements		99.3000 State and local government purchases, other general government	
76.0100 Motion pictures	78	OTHER SYMBOLS	
76.0200 Amusement and recreation services	79	Outputs	
*77 Health, educational, and social services and nonprofit organizations		T.I.U. Total intermediate use	
77.0100 Doctors and dentists	801-3, 8041	T.F.D. Total final demand	
77.0200 Hospitals	806	T.C.O. Total commodity output	
77.0300 Other medical and health services	074, 8049, 805, 807-9	Inputs	
		T.I.I. Total intermediate inputs	
		V.A. Value added	
		T.I.O. Total industry output	

*An asterisk before a six-digit code indicates that the commodity includes one or more capital items; commodities that are not asterisked do not include a capital item.

#A summation sign before a two-digit code, usually shown indented, identifies the 76 using industries in the CFT. Note that I-O 11 and 12 are combined in the CFT estimates for using industries.

^{1/} Excludes government enterprises.

Table 2.--Detailed Flows of Capital Goods to I-O Industries, 1972
(Millions of dollars--producers' value)

	1	2	3	4	5	6	7	8	9	10	11 & 12	13	14
60200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
80000...	-----	-----	-----	-----	-----	-----	-----	*53.4	-----	-----	-----	-----	-----
110101...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110102...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110103...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110104...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110105...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110106...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110107...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110201...	-----	-----	-----	-----	29.9	32.0	15.7	53.3	42.3	10.7	-----	28.4	538.2
110202...	-----	-----	-----	4.0	3.6	5.6	32.0	52.0	4.4	.5	337.5	11.9	154.5
110203...	-----	-----	-----	20.4	-----	-----	-----	-----	-----	-----	36.1	-----	-----
110204...	-----	-----	-----	4.3	-----	-----	-----	-----	-----	-----	-----	-----	-----
110205...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110206...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110207...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110208...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110209...	-----	-----	-----	9.1	-----	-----	-----	-----	-----	-----	-----	-----	-----
110301...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110302...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110303...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110304...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110305...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110501...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110502...	608.0	820.3	-----	3.7	-----	-----	-----	-----	-----	-----	-----	-----	-----
110503...	-----	-----	-----	-----	-----	-----	-----	*2,340.1	-----	-----	-----	-----	-----
110504...	-----	-----	-----	-----	*.4	*18.3	*4.4	*345.5	*3.1	*1.0	-----	-----	-----
110507...	-----	-----	47.0	11.5	6.7	9.5	65.5	104.2	1.1	1.0	-----	-----	-----
110508...	-----	-----	-----	-----	56.3	136.1	95.2	-----	59.0	9.1	-----	-----	-----
130100...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
130700...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
170100...	-----	-----	-----	.4	-----	-----	.1	-----	.2	-----	13.6	.3	2.2
170200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	.5	-----	-----
200903...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	2.4
220101...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
220102...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
220200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
220300...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
220400...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
230100...	-----	.2	-----	.4	-----	-----	-----	-----	.2	-----	14.5	.6	3.5
230200...	-----	.8	.1	1.2	-----	.1	.3	-----	.7	.1	45.2	1.4	10.5
230300...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
230400...	-----	.4	-----	.4	-----	-----	-----	-----	.1	-----	10.8	.5	2.6
230500...	-----	.5	-----	.4	-----	-----	.1	-----	.3	-----	16.0	2.4	9.4
230600...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	2.3	.1	.6
230700...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	.8	8.3
270100...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
320302...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	.5	-----	-----
320400...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	.2	-----	-----
370402...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
381000...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
390200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	*13.0
400600...	-----	-----	-----	-----	5.0	3.6	1.2	10.4	3.6	3.3	-----	.1	111.8
400700...	1.6	54.4	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
420202...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	.1	-----
420800...	-----	-----	-----	-----	-----	-----	-----	*4.2	-----	-----	*16.7	-----	30.2
421100...	-----	-----	-----	-----	-----	-----	-----	1.9	-----	-----	1.3	-----	.4
430100...	-----	-----	-----	-----	.9	.8	.1	1.9	.1	.4	-----	.6	5.4
430200...	.2	5.3	20.2	2.2	1.8	1.4	.7	24.5	8.8	.8	24.8	.4	2.9
440001...	247.0	*3,040.8	-----	35.2	-----	-----	-----	-----	-----	-----	32.7	-----	-----
440002...	-----	-----	1.0	167.0	-----	-----	-----	-----	.2	-----	19.6	.5	2.5
450100...	-----	4.0	.7	1.7	6.5	38.5	139.8	14.2	62.6	15.6	2,650.9	.2	.6
450200...	-----	-----	-----	-----	10.4	62.5	210.7	-----	80.3	22.8	8.9	-----	-----
450300...	-----	-----	-----	-----	-----	-----	-----	*204.0	-----	-----	*125.7	-----	-----
460200...	-----	-----	-----	-----	.3	2.0	6.5	-----	-----	.7	1.0	-----	98.4
460300...	-----	-----	-----	-----	.1	.9	2.9	-----	-----	.3	10.8	-----	1.8
460400...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	*3.4	-----	92.1
470100...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	11.5	.1
470200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	4.3	-----
470300...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	.1	2.8	1.0
470401...	17.9	17.6	-----	.2	.2	.7	2.3	-----	.7	.2	117.5	.9	6.7
470402...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
470403...	1.3	1.4	-----	.2	.1	.3	.5	-----	.6	.1	10.5	1.4	2.1
480100...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	707.0
480200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Table 2.--Detailed Flows of Capital Goods to I-O Industries, 1972
(Millions of dollars--producers' value)
- continued -

	1	2	3	4	5	6	7	8	9	10	11 & 12	13	14
480300...	.7	33.1	7.3	1.6	-----	-----	1.3	-----	-----	-----	3.9	-----	-----
480400...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
480500...	-----	-----	-----	-----	-----	-----	-----	-----	.1	-----	3.2	.4	.9
480600...	-----	-----	-----	15.7	-----	-----	-----	-----	-----	-----	-----	3.8	-----
490100...	2.4	*114.2	7.2	-----	.5	3.7	12.4	45.8	4.7	1.2	96.7	1.0	37.0
490300...	-----	-----	-----	.7	-----	-----	.7	-----	-----	-----	-----	-----	5.8
490600...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1.0	.2
490700...	-----	.1	-----	-----	.1	.8	2.8	-----	1.1	.3	.7	1.9	5.4
500002...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
510101...	.1	2.7	5.9	2.8	-----	5.9	-----	49.3	4.7	-----	-----	-----	58.1
510102...	-----	1.6	.2	.9	-----	.2	.3	1.7	.6	-----	17.0	.5	11.4
510200...	-----	.4	-----	-----	-----	-----	-----	-----	-----	-----	6.7	.5	2.7
510300...	-----	.8	-----	.8	-----	-----	-----	-----	-----	.6	-----	-----	14.5
510400...	-----	.6	-----	.1	-----	.1	.1	.3	.2	-----	7.0	1.3	4.7
520100...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
520200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
520300...	.3	13.7	.2	.5	-----	.1	.1	.2	.2	-----	19.6	3.0	70.5
520400...	-----	.1	-----	-----	-----	-----	-----	-----	-----	-----	2.4	.3	1.7
520500...	-----	.6	.1	-----	-----	-----	-----	-----	-----	-----	4.0	.6	9.2
530100...	-----	.1	.2	-----	.1	.2	.1	-----	.1	-----	9.1	16.1	1.2
530200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
530300...	-----	-----	-----	-----	2.3	3.3	5.7	20.8	2.7	2.0	-----	2.0	22.8
530400...	-----	-----	-----	-----	1.0	1.3	2.1	8.3	1.0	.8	8.2	1.7	16.2
530500...	-----	-----	-----	-----	.7	.9	1.7	5.9	.8	.6	.2	.6	6.5
530600...	.2	8.5	-----	.2	-----	-----	-----	-----	-----	-----	37.1	1.4	2.8
530800...	-----	-----	-----	-----	1.1	1.4	2.6	9.3	1.1	.9	-----	.9	10.1
540100...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
540200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
540300...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
540400...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	.1
540500...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	.1	.6
540600...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	.1	.3
540700...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
550200...	-----	-----	-----	-----	-----	.1	.1	.1	.1	-----	-----	.2	.3
550300...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
560100...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
560300...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
560400...	-----	-----	.3	.3	.1	.4	-----	.4	.7	.1	1.6	11.9	6.3
570300...	-----	-----	-----	-----	-----	-----	-----	.1	-----	-----	-----	-----	.1
580100...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	7.2
580300...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	.8	1.8
590100...	18.5	15.9	.8	4.9	.2	1.0	3.8	-----	5.9	1.1	168.5	.1	8.1
590200...	-----	-----	.5	3.3	.2	.7	2.3	-----	3.8	.7	80.4	.2	20.2
590301...	448.5	399.6	19.2	75.2	2.9	11.9	48.4	115.4	51.6	9.4	1,425.6	7.4	319.2
600100...	-----	1.3	2.2	40.0	.1	.3	1.0	3.6	.6	.1	11.7	.8	7.5
600200...	-----	-----	-----	.6	-----	-----	-----	-----	-----	-----	-----	-----	-----
610100...	-----	.4	.9	-----	-----	-----	.9	28.7	3.9	.8	40.1	-----	3.3
610200...	-----	-----	50.7	.3	-----	-----	-----	-----	.1	-----	2.9	-----	.1
610300...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
610500...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
610601...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
610602...	.1	3.7	-----	-----	.3	1.3	3.8	7.2	2.0	.5	10.9	-----	-----
610700...	-----	-----	.5	-----	-----	-----	-----	-----	-----	-----	-----	.1	1.5
620100...	-----	1.2	2.4	7.3	.2	.5	.4	1.3	.8	.1	14.6	1.4	14.5
620200...	-----	-----	-----	-----	.5	2.6	.5	1.2	1.9	.3	62.7	-----	16.6
620400...	-----	.2	-----	-----	-----	-----	-----	-----	-----	-----	-----	.2	.6
620500...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
620600...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
620700...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
630100...	-----	2.4	.4	2.0	.7	3.3	.9	9.5	1.2	.3	1.7	1.9	23.4
630300...	.1	3.2	.3	1.7	.1	.3	.6	.3	.8	.2	49.3	4.7	24.6
640200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
640400...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
641100...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	33.6
641200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	.2	-----	.4
650100...	7.9	34.3	.3	1.8	-----	.5	2.7	2.0	1.1	.1	43.0	.1	7.5
650300...	11.7	67.7	1.0	2.8	.5	3.1	10.7	5.5	4.2	1.2	35.5	.1	22.9
650400...	.3	2.3	-----	.3	-----	-----	.1	.3	-----	-----	1.8	-----	.5
650500...	.3	4.8	.1	-----	-----	-----	.4	1.0	-----	-----	2.2	-----	1.4
660000...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
690100...	58.2	434.1	8.9	33.1	2.7	14.3	46.5	46.9	22.3	5.4	639.3	6.2	172.0
690200...	70.6	62.7	3.1	29.1	.4	1.8	8.0	17.8	7.6	1.2	224.7	1.5	55.1
710200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
720200...	.1	2.5	-----	.1	-----	-----	-----	-----	-----	-----	3.8	.5	12.9
800000...	-----	2.4	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Total ...	1,496.0	5,160.9	181.7	488.4	136.9	372.3	739.0	3,590.6	394.2	94.5	6,537.4	144.5	2,852.5

Table 2.--Detailed Flows of Capital Goods to I-O Industries, 1972
(Millions of dollars--producers' value)
- continued -

	15	16	17	18	19	20	21	22	23	24	25	26	27
60200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
80000...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110101...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110102...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110103...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110104...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110105...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110106...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110107...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110201...	56.3	114.3	36.1	115.2	13.5	143.6	2.1	64.3	31.9	128.8	31.9	149.4	190.1
110202...	7.7	27.8	7.6	40.2	8.3	41.7	.6	15.7	7.4	38.5	10.3	117.1	78.3
110203...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110204...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110205...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110206...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110207...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110208...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110209...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110301...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110302...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110303...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110304...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110305...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110501...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110502...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110503...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110504...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110507...	-----	-----	-----	-----	-----	17.6	-----	-----	-----	10.0	-----	-----	15.0
110508...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
130100...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
130700...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
170100...	-----	.3	.1	.8	.3	.6	-----	.3	.2	.5	.5	1.7	.5
170200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
200903...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	2.4
220101...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
220102...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
220200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
220300...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
220400...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
230100...	-----	.6	.2	1.6	.4	.9	-----	.7	.2	1.5	.8	3.6	1.3
230200...	.3	1.5	.7	4.1	1.1	2.3	.1	1.3	.8	3.6	2.6	9.6	3.1
230300...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	.1	-----
230400...	-----	.4	.1	1.2	.4	.8	-----	.4	.1	.9	.8	2.8	.9
230500...	.2	1.4	.6	3.1	1.1	3.4	.2	2.8	1.4	3.6	3.2	5.1	2.2
230600...	-----	.1	-----	.3	-----	.1	-----	.1	-----	.1	.1	.7	.1
230700...	.5	3.1	.7	8.5	1.3	3.3	.2	1.5	.8	3.7	2.6	4.6	2.1
270100...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
320302...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	.5	-----
320400...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	.2	-----
370402...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1.0
381000...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
390200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
400600...	-----	1.7	.4	.7	-----	1.5	-----	-----	-----	99.2	-----	-----	156.5
400700...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
420202...	-----	-----	-----	-----	-----	*23.9	-----	.1	.1	-----	-----	-----	-----
420800...	-----	-----	-----	-----	-----	-----	-----	-----	-----	84.2	-----	-----	181.8
421100...	-----	.1	-----	.3	-----	-----	-----	-----	-----	.2	-----	.1	-----
430100...	.2	1.0	.1	-----	.1	6.4	.1	.2	.1	38.6	.6	.1	25.4
430200...	.1	.6	.1	-----	.1	7.6	-----	.1	.1	13.1	.3	.1	11.7
440001...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
440002...	-----	1.0	.2	.2	-----	1.6	-----	.3	.2	1.5	.2	.1	1.3
450100...	-----	.1	.1	-----	-----	14.8	.1	.1	-----	.9	.2	.1	1.7
450200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
450300...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
460200...	20.5	9.5	2.3	11.4	2.0	20.9	.5	3.8	2.1	7.6	1.9	3.7	12.7
460300...	.8	.6	.1	.8	.2	.8	-----	.2	.2	1.4	.4	.7	3.9
460400...	2.2	8.1	2.0	9.4	1.6	17.2	.3	3.3	1.8	18.8	4.9	9.5	28.1
470100...	-----	.1	-----	-----	-----	.3	-----	3.6	2.5	.2	-----	-----	-----
470200...	-----	-----	-----	-----	-----	-----	-----	8.4	4.8	-----	-----	-----	-----
470300...	-----	-----	-----	-----	-----	19.9	.1	7.5	2.7	-----	-----	-----	4.3
470401...	.5	2.1	.5	2.0	.4	1.9	.2	.9	.5	3.2	1.9	1.0	2.4
470402...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
470403...	-----	.2	-----	-----	-----	.6	-----	1.3	1.0	.6	.2	.2	1.4
480100...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
480200...	-----	398.6	83.8	285.2	17.1	-----	-----	-----	-----	4.5	2.8	.5	2.2

Table 2.--Detailed Flows of Capital Goods to I-O Industries, 1972
(Millions of dollars--producers' value)
- continued -

	15	16	17	18	19	20	21	22	23	24	25	26	27
480300...	-----	-----	-----	-----	-----	176.9	2.2	36.1	19.2	-----	-----	-----	-----
480400...	-----	-----	-----	-----	-----	-----	-----	-----	-----	219.2	50.7	-----	-----
480500...	-----	1.1	.2	.9	.6	.5	-----	.2	-----	6.9	7.5	459.9	.8
480600...	14.9	-----	-----	44.8	-----	52.9	-----	3.2	.6	-----	-----	-----	154.7
490100...	.8	4.3	1.0	5.1	.8	6.1	.2	2.3	1.3	63.9	3.8	8.6	62.4
490300...	-----	-----	-----	-----	-----	-----	-----	-----	-----	15.5	-----	-----	15.4
490600...	-----	-----	.1	-----	.6	4.1	-----	-----	.2	-----	-----	-----	10.7
490700...	.3	8.1	4.5	12.2	6.5	12.9	2.1	1.5	1.7	59.1	6.7	15.3	54.8
500002...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
510101...	2.4	4.7	6.7	23.6	2.7	4.4	-----	4.4	2.4	38.0	-----	51.7	35.7
510102...	.2	1.9	.6	5.3	1.0	1.7	-----	1.0	.6	3.8	2.1	8.5	2.9
510200...	.1	.6	.2	1.1	.4	.4	-----	.4	.2	1.4	.9	4.4	1.4
510300...	.7	1.9	.5	1.3	.7	.5	-----	.5	-----	3.3	-----	.8	6.9
510400...	.2	1.1	.3	2.7	.5	.8	-----	.6	.3	2.8	1.6	20.2	2.1
520100...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
520200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
520300...	1.0	8.1	.5	2.3	.4	.5	-----	.8	.4	2.3	1.1	5.8	13.0
520400...	.2	.7	.1	.6	.1	.3	-----	.1	.1	1.0	.6	.3	.5
520500...	.2	1.7	.4	2.0	.3	1.0	.1	.7	.3	7.1	1.3	2.3	6.2
530100...	.3	.3	.1	.4	.2	.6	.1	.2	.1	1.6	.6	2.4	3.9
530200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	12.1	-----	-----	24.2
530300...	.7	9.9	1.2	3.9	1.1	5.8	-----	1.9	.7	51.8	3.7	5.4	71.4
530400...	.4	7.0	1.0	2.8	.8	4.1	-----	1.4	.5	36.2	3.0	3.6	45.4
530500...	.2	2.7	.4	1.2	.3	1.7	-----	.5	.1	14.5	1.2	1.6	17.4
530600...	.1	.2	.1	.1	.2	1.1	.1	2.2	1.1	2.1	.5	.2	4.3
530800...	.3	4.4	.6	1.6	.5	2.6	-----	.8	.2	22.6	1.7	2.4	27.7
540100...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
540200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
540300...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
540400...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	.1	-----
540500...	-----	.2	-----	.2	-----	.1	-----	.1	-----	.1	.2	.2	.1
540600...	-----	2.2	.6	64.2	7.0	-----	-----	1.4	.7	.5	.2	.4	.1
540700...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
550200...	-----	.1	-----	.1	-----	.1	-----	-----	-----	.1	-----	-----	.1
550300...	-----	-----	-----	-----	-----	-----	-----	-----	-----	.3	-----	-----	.2
560100...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
560300...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
560400...	.1	.2	-----	.6	.1	2.0	-----	.1	-----	1.2	1.8	3.9	5.6
570300...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	.1	-----
580100...	.2	.5	.1	.5	.1	1.3	-----	.3	.2	1.3	.4	.7	2.3
580300...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	.5
590100...	-----	.8	.3	.7	.3	19.3	-----	1.0	.6	1.1	1.3	1.7	1.9
590200...	.2	2.0	.8	1.6	.7	26.4	.1	2.8	1.3	4.3	5.0	3.0	4.9
590301...	12.5	22.0	9.0	55.7	16.2	195.3	2.4	32.0	16.2	31.9	31.7	127.4	46.4
600100...	.4	1.3	.7	.8	2.2	1.7	-----	.7	.3	3.3	1.4	1.8	2.6
600200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
610100...	-----	.7	-----	3.6	.4	2.0	-----	.7	.3	1.5	.4	.3	1.4
610200...	-----	-----	-----	.1	-----	.1	-----	-----	-----	-----	-----	-----	-----
610300...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
610500...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
610601...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
610602...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
610700...	.1	.5	.1	.7	.1	.9	-----	.2	.1	.6	.4	.6	.5
620100...	.4	1.0	.3	.5	.4	.7	-----	.2	.2	2.8	.8	.7	20.3
620200...	.4	5.7	.1	.5	.1	1.4	-----	-----	-----	28.5	1.2	.5	69.3
620400...	-----	.2	-----	-----	-----	-----	-----	-----	-----	.6	-----	.1	.3
620500...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
620600...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
620700...	-----	.1	-----	.1	-----	.1	-----	-----	-----	-----	-----	-----	-----
630100...	1.2	3.2	.8	.6	.3	.6	.1	.2	.1	8.5	.9	.7	50.2
630300...	.8	4.8	1.5	11.4	2.5	3.8	.2	3.0	1.6	10.1	6.1	79.9	9.0
640200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
640400...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
641100...	30.1	-----	-----	.1	-----	.1	-----	-----	-----	1.0	-----	.8	.1
641200...	-----	.1	-----	.1	-----	.1	-----	-----	-----	.2	-----	.2	.1
650100...	.2	.7	.1	1.1	.1	2.9	-----	.4	.2	2.5	.5	2.4	3.5
650300...	3.3	2.4	.5	3.4	.3	8.0	-----	1.2	.5	9.5	1.4	11.9	11.4
650400...	-----	.3	-----	-----	-----	.2	-----	-----	-----	.3	-----	.8	.2
650500...	-----	.3	-----	.3	-----	.4	-----	-----	-----	1.0	.1	4.7	2.2
660000...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
690100...	9.8	20.8	4.3	31.9	4.2	57.6	.5	10.8	5.3	78.9	11.7	.72.4	113.0
690200...	2.1	3.9	1.5	10.0	2.7	26.8	.3	5.5	2.5	6.1	5.4	26.7	7.8
710200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
720200...	.2	1.3	.1	.4	.1	.1	-----	.1	.1	.5	.2	1.0	2.6
800000...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Total ...	174.3	707.2	175.0	786.1	103.4	962.6	12.9	236.6	119.1	1,227.1	224.3	1,247.9	1,648.8

Table 2.--Detailed Flows of Capital Goods to I-O Industries, 1972
(Millions of dollars--producers' value)
- continued -

	28	29	30	31	32	33	34	35	36	37	38	39	40
60200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
80000...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110101...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110102...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110103...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110104...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110105...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110106...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110107...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110201...	88.4	120.2	22.0	505.8	206.1	3.0	10.0	51.7	135.2	230.6	151.3	10.8	96.6
110202...	33.5	39.3	6.2	84.4	37.1	.8	6.7	11.9	41.4	44.2	25.4	3.5	21.1
110203...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110204...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110205...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110206...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110207...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110208...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110209...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110301...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110302...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110303...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110304...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110305...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110501...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110502...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110503...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110504...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110507...	-----	-----	-----	63.9	-----	-----	-----	-----	-----	-----	-----	-----	-----
110508...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
130100...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
130700...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
170100...	.3	.4	.1	.1	.8	-----	.2	.2	.9	.4	.4	.2	.4
170200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
200903...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
220101...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
220102...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
220200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
220300...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
220400...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
230100...	.2	1.2	.2	.2	1.3	-----	.3	.4	1.4	1.2	.9	.4	.9
230200...	1.2	2.9	.6	1.3	3.8	.1	.9	1.7	4.0	3.3	2.1	.8	1.8
230300...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
230400...	.1	.7	.1	.1	1.0	-----	.4	.2	1.1	.9	.6	.2	.5
230500...	.8	2.7	.5	.5	4.9	-----	1.2	2.5	3.6	3.5	2.7	1.2	2.4
230600...	-----	.1	-----	-----	.3	-----	-----	-----	.1	.1	.1	-----	.1
230700...	1.3	1.3	.4	.9	4.4	.2	1.5	1.9	3.8	6.6	2.9	.9	1.6
270100...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
320302...	-----	-----	-----	-----	-----	-----	-----	-----	.1	-----	-----	-----	-----
320400...	-----	-----	-----	-----	-----	-----	-----	-----	.3	-----	-----	-----	-----
370402...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
381000...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
390200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
400600...	58.2	28.7	1.6	128.0	.5	-----	-----	.9	1.3	82.4	17.7	.1	1.1
400700...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
420202...	-----	-----	-----	-----	-----	-----	-----	-----	-----	.5	.1	-----	.5
420800...	55.5	10.9	3.4	-----	-----	-----	-----	-----	23.2	44.6	35.3	-----	-----
421100...	-----	-----	-----	-----	.1	-----	.1	-----	.1	.3	.1	-----	.1
430100...	6.1	.3	.1	18.0	1.3	.1	-----	.7	4.3	21.0	14.8	.4	.4
430200...	2.9	.2	-----	10.9	.7	.1	-----	.4	2.9	9.7	4.2	.4	.3
440001...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
440002...	-----	-----	-----	.2	.4	-----	-----	.4	1.7	1.2	.7	-----	.2
450100...	.1	-----	-----	*21.9	.1	-----	-----	.3	27.6	14.1	2.5	.2	1.3
450200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
450300...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
460200...	6.9	3.7	.5	6.7	-----	6.6	8.7	5.2	9.5	-----	10.9	3.2	2.7
460300...	2.0	1.1	.1	1.9	.6	-----	-----	1.0	1.7	12.6	7.2	1.3	1.1
460400...	15.0	8.1	1.0	13.7	6.4	.1	.3	3.4	5.5	13.9	7.4	7.3	5.6
470100...	-----	-----	-----	-----	.5	-----	-----	-----	.4	42.7	22.7	.5	31.7
470200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	17.9	9.5	43.0	38.3
470300...	-----	-----	-----	2.5	204.4	-----	.3	30.3	96.3	13.9	9.0	-----	15.6
470401...	1.3	.8	.2	.9	2.7	.1	.4	1.8	3.1	5.2	2.2	.6	.7
470402...	-----	-----	-----	-----	-----	-----	-----	-----	-----	109.3	61.1	-----	-----
470403...	.2	.1	-----	.5	.5	-----	-----	.4	2.3	11.3	41.8	.7	10.2
480100...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
480200...	69.5	.2	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Table 2.--Detailed Flows of Capital Goods to I-O Industries, 1972
(Millions of dollars--producers' value)
- continued -

	28	29	30	31	32	33	34	35	36	37	38	39	40
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	.2	.5	.1	-----	1.3	-----	.2	-----	.7	2.0	-----	2.2	1.1
	239.6	39.6	6.6	30.7	333.6	1.4	2.4	62.5	186.2	55.8	31.3	-----	17.5
	8.8	4.8	.7	31.0	11.3	.2	.5	6.2	10.8	16.6	9.3	2.7	2.5
	-----	.7	-----	9.0	8.3	-----	-----	-----	16.0	23.1	6.7	2.0	1.8
	5.5	1.9	.2	.2	4.4	-----	-----	4.6	7.4	163.6	9.1	.9	4.3
	19.4	59.1	6.6	17.4	25.2	.9	.7	11.3	31.7	33.1	18.3	20.6	4.3
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	21.1	47.3	5.0	37.2	34.7	-----	7.0	17.9	17.6	44.9	21.4	4.5	11.4
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	1.1	3.2	.6	1.9	3.3	.1	1.2	1.5	2.9	5.2	2.0	.9	1.6
	.4	1.5	.2	.3	1.3	-----	.3	.7	1.1	1.3	.9	.2	.6
	3.8	1.7	-----	-----	3.3	-----	-----	1.7	3.6	3.1	1.5	-----	.4
	.4	2.7	.5	.9	2.1	-----	.6	.9	1.4	3.7	1.3	.6	.8
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	6.3	4.2	.3	3.1	2.4	-----	.3	5.3	3.0	2.5	5.3	1.4	3.0
	.4	.2	-----	.2	1.0	-----	.1	.6	.8	1.4	.7	.2	.3
	1.8	1.6	.3	1.6	2.7	.1	.5	1.4	2.1	10.9	2.9	.6	.8
	.8	1.3	-----	1.4	1.3	-----	.1	2.4	1.6	4.0	2.4	.7	1.2
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	13.2	.5	.4	3.1	10.8	-----	.4	8.2	15.0	31.6	28.7	-----	-----
	8.9	.3	.2	23.6	8.5	-----	.2	5.9	10.6	60.7	63.7	2.0	2.2
	3.5	.1	.1	16.5	2.9	-----	.1	2.4	4.2	35.6	41.6	1.5	1.9
	.9	.5	.1	6.6	1.4	-----	.1	1.3	5.2	19.8	18.5	.4	.9
	-----	-----	-----	1.4	-----	-----	-----	-----	-----	19.6	4.4	2.6	18.5
	5.8	.2	.2	10.6	4.6	-----	.2	3.2	6.4	23.2	24.4	.9	.9
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	-----	.1	-----	-----	.2	-----	-----	.2	.1	.3	.1	-----	.1
	-----	-----	-----	-----	.9	-----	4.0	-----	-----	-----	-----	-----	-----
	-----	-----	-----	-----	.1	-----	-----	-----	.1	.2	.1	-----	.1
	-----	-----	-----	.1	-----	-----	-----	-----	-----	.3	-----	-----	-----
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	1.9	1.3	.3	2.9	1.7	-----	-----	4.0	7.9	6.4	1.4	.3	1.1
	-----	.1	-----	-----	-----	-----	-----	-----	-----	.1	-----	-----	-----
	1.2	.7	.1	1.1	.5	-----	-----	.2	.5	1.1	.6	.6	.4
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	.3	-----	-----	.3	2.3	-----	-----	-----	-----	1.8	1.0	-----	.3
	.1	.3	.3	1.6	.8	-----	.1	.2	6.1	1.8	.9	.9	2.3
	.8	.7	.5	4.6	1.6	.1	.1	1.1	16.1	4.7	2.5	2.2	6.0
	9.2	35.7	8.5	80.0	28.0	2.3	12.9	22.2	119.9	46.3	29.4	18.3	53.7
	.4	2.6	.3	2.0	2.0	-----	-----	1.5	2.7	3.0	1.2	.2	1.2
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	-----	-----	.2	11.6	-----	-----	.8	-----	5.9	6.1	.4	-----	-----
	-----	-----	-----	.3	-----	-----	-----	-----	.1	.1	-----	-----	-----
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	.3	.2	.1	.2	.7	-----	.2	.3	.6	1.1	.5	.1	.3
	7.4	14.8	3.2	6.3	3.5	-----	-----	1.2	4.0	5.3	2.3	.4	1.1
	27.0	21.1	5.7	32.4	22.3	-----	-----	21.8	21.8	4.9	2.6	.7	1.5
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	.1	.8	-----	-----	.2	-----	-----	.2	-----	.5	.2	-----	-----
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	12.2	41.5	9.2	11.4	10.9	.3	.3	3.4	8.4	20.7	10.0	.8	.9
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	3.0	9.0	1.5	2.7	9.9	.4	2.2	4.5	8.3	11.3	6.4	1.9	5.5
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	-----	2.2	.1	2.1	.2	-----	-----	-----	-----	-----	.1	-----	.1
	.1	.1	-----	.5	.1	-----	-----	-----	.1	.3	.1	-----	.1
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	.7	.7	.1	2.4	1.1	-----	.1	.4	1.9	3.1	1.5	.5	.7
	2.8	2.2	.1	4.1	3.5	.4	.8	1.3	4.7	9.0	5.4	1.0	1.4
	.1	-----	-----	-----	.4	-----	-----	-----	.1	.3	.2	.1	-----
	.4	.7	-----	.4	1.2	-----	.1	.2	.3	1.0	.7	.2	.1
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	43.5	35.7	5.1	39.0	47.1	.6	3.2	17.4	49.8	99.2	52.0	8.6	21.1
	1.7	6.5	1.3	13.7	5.2	.3	2.4	4.2	18.9	9.6	5.4	2.9	9.2
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	1.0	.7	.1	.5	.5	-----	.1	.9	.5	.4	.9	.2	.5
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	799.6	572.6	95.8	1,279.4	1,087.3	18.2	73.2	338.5	979.0	1,492.1	854.1	160.5	418.9

Table 2.--Detailed Flows of Capital Goods to I-O Industries, 1972
(Millions of dollars--producers' value)
- continued -

	41	42	43	44	45	46	47	48	49	50	51	52	53
60200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
80000...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110101...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110102...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110103...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110104...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110105...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110106...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110107...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110201...	35.0	75.3	39.9	35.9	35.0	14.8	37.0	35.9	39.3	24.9	59.1	39.0	48.5
110202...	10.9	21.2	8.8	10.6	12.0	4.3	13.7	10.9	13.7	9.2	19.5	13.3	23.8
110203...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110204...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110205...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110206...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110207...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110208...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110209...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110301...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110302...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110303...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110304...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110305...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110501...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110502...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110503...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110504...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110507...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110508...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
130100...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
130700...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
170100...	.4	.4	.2	.1	.3	.1	.3	.2	.4	.3	.4	.4	.3
170200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
200903...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
220101...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
220102...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
220200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
220300...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
220400...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
230100...	.7	1.1	.4	.2	.5	.1	.4	.4	.7	.4	.7	.5	.7
230200...	1.8	2.4	1.0	.9	1.4	.4	1.3	1.0	1.7	1.3	1.8	1.9	1.8
230300...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
230400...	.5	.8	.2	.1	.5	.1	.4	.4	.5	.4	.6	.5	.5
230500...	2.4	4.3	3.1	2.5	2.6	.9	1.5	1.9	3.0	2.0	3.4	2.8	5.1
230600...	.1	.1	-----	-----	-----	-----	.1	.1	.1	.1	.1	.1	.1
230700...	1.9	2.5	1.4	.9	1.5	.5	1.2	.9	1.6	1.2	1.0	1.6	1.6
270100...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
320302...	-----	.1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
320400...	.1	.1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
370402...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
381000...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
390200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
400600...	1.1	2.0	2.9	4.5	4.5	.6	1.9	1.4	.8	.4	-----	1.4	.1
400700...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
420202...	.2	.4	-----	.1	.3	.1	.4	.3	.3	.5	.1	.1	.2
420800...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
421100...	.1	.1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
430100...	.3	.4	.9	.6	.4	.1	.1	.1	.2	.1	.1	.2	.3
430200...	.2	.3	.7	.5	.3	.1	.1	.1	.2	.1	.1	.1	.2
440001...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
440002...	.1	.5	.2	.4	-----	-----	.2	-----	-----	.2	-----	.4	.2
450100...	.4	.5	.7	.3	1.6	.3	.3	.2	.3	.2	-----	.3	.2
450200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
450300...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
460200...	3.8	4.4	10.9	5.3	8.4	.9	4.4	3.5	6.4	3.9	8.7	8.4	15.6
460300...	1.5	1.9	7.0	3.6	5.5	.6	2.8	2.4	4.2	2.8	5.6	5.5	4.2
460400...	8.0	9.6	19.6	9.9	15.7	1.7	8.0	6.4	11.5	7.4	15.6	15.1	8.7
470100...	48.1	48.8	4.5	22.5	35.8	5.1	73.6	38.6	56.0	36.1	14.9	19.4	45.1
470200...	44.6	46.3	-----	13.8	11.5	1.9	8.7	8.2	16.1	5.0	5.8	16.2	6.4
470300...	19.9	22.9	.8	6.9	10.1	1.4	22.8	9.9	-----	6.3	25.8	22.4	9.6
470401...	1.0	1.5	1.0	.8	1.3	.5	.7	.7	.9	.8	.5	.9	.8
470402...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
470403...	8.5	13.0	1.4	4.5	5.7	1.3	4.9	3.7	5.8	3.4	1.6	4.1	3.6
480100...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
480200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Table 2.--Detailed Flows of Capital Goods to I-O Industries, 1972
(Millions of dollars--producers' value)
- continued -

	41	42	43	44	45	46	47	48	49	50	51	52	53
480300...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
480400...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
480500...	1.1	5.0	.2	-----	-----	-----	.2	.5	.6	.5	.4	.6	.5
480600...	15.3	19.7	-----	-----	-----	-----	10.5	-----	-----	-----	14.4	10.0	1.1
490100...	3.1	4.1	3.6	2.3	3.2	.6	1.6	1.4	2.6	1.5	3.0	3.3	2.2
490300...	2.2	2.7	2.8	1.6	2.5	.4	1.3	.9	1.7	-----	2.3	2.5	1.6
490600...	3.7	12.6	1.7	1.1	2.5	.4	1.8	.7	2.3	.8	-----	1.2	.8
490700...	8.5	8.6	6.5	3.7	5.1	1.0	2.9	2.3	4.4	2.5	5.9	5.8	3.8
500002...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
510101...	10.9	14.6	24.3	15.2	21.5	10.1	12.4	9.7	17.7	11.1	22.7	15.7	20.0
510102...	1.5	2.4	1.4	1.0	1.4	.7	1.2	.9	1.6	1.3	1.4	1.7	1.6
510200...	.5	.9	.6	.4	.5	-----	.4	.5	.6	.4	.7	.5	.7
510300...	.7	1.2	1.5	1.0	.9	1.2	.5	.7	.8	.7	.9	1.1	-----
510400...	.7	1.7	.8	.6	.9	.4	.7	.6	.9	.7	1.5	1.0	1.3
520100...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
520200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
520300...	.7	3.6	2.2	.7	1.6	.3	.8	7.3	12.3	8.2	2.1	12.3	2.1
520400...	.5	.6	.6	.3	.5	.2	.5	.5	.9	.6	.2	.9	.3
520500...	.8	1.4	.6	.5	.8	.3	.6	.8	.8	.6	-----	.8	.7
530100...	.6	1.8	3.3	.6	1.5	.5	2.2	1.3	2.1	1.5	43.3	2.0	43.8
530200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
530300...	3.0	4.4	2.5	1.0	2.0	.4	1.4	1.0	2.0	1.5	1.8	1.6	3.2
530400...	3.0	4.2	3.1	1.2	2.3	.5	2.5	1.8	3.1	2.2	1.5	2.8	2.5
530500...	1.2	1.6	.6	.3	.9	.1	1.1	.5	1.1	.7	.7	.5	1.2
530600...	6.2	7.0	4.1	7.2	11.5	3.5	1.8	3.6	6.0	4.0	.6	6.0	2.9
530800...	1.3	1.9	1.0	.3	1.0	.2	.7	.4	.9	.7	.9	.7	1.3
540100...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
540200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
540300...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
540400...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
540500...	.1	.1	-----	-----	-----	-----	.1	-----	.1	-----	-----	.1	.1
540600...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
540700...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
550200...	.1	.1	-----	-----	.1	-----	.1	.1	.1	.1	-----	.1	.1
550300...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
560100...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
560300...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
560400...	.4	1.0	2.2	1.0	2.1	.5	1.3	1.0	1.6	1.1	24.2	1.7	24.4
570300...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	.1	-----	.1
580100...	.6	.7	1.4	.8	1.1	.2	.7	.6	.9	.6	1.1	1.1	.6
580300...	.7	.9	1.0	.3	.5	.1	.3	.5	.8	.7	1.1	-----	-----
590100...	1.4	2.2	-----	.1	.1	-----	.1	-----	.1	-----	-----	.1	.3
590200...	3.7	5.7	.2	.5	.4	.1	.2	.2	.2	.2	.1	.3	.8
590301...	36.3	58.4	8.9	10.4	13.8	4.5	13.4	11.0	17.5	15.9	18.6	17.1	13.9
600100...	1.2	.8	2.5	.5	1.2	.3	.4	.5	.7	.6	.4	.9	.8
600200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
610100...	-----	-----	-----	-----	.5	.2	.2	.2	.3	.2	-----	.3	.2
610200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
610300...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
610500...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
610601...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
610602...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
610700...	.3	.4	.2	.2	.2	.1	.2	.1	.2	.1	.1	.2	.2
620100...	.5	1.1	1.2	.2	.8	.2	.7	.5	.7	.5	.8	.6	1.1
620200...	.9	1.1	-----	.8	1.3	.2	.7	.5	1.0	-----	-----	-----	1.5
620400...	.1	.2	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	.1
620500...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
620600...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
620700...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
630100...	.7	2.0	1.7	.3	.9	.2	.7	.6	.7	.6	1.8	.8	1.6
630300...	4.2	6.8	3.4	2.7	4.7	1.5	3.5	2.8	5.1	3.5	6.0	5.0	5.8
640200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
640400...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
641100...	-----	-----	.2	-----	-----	-----	-----	-----	-----	-----	-----	.1	-----
641200...	-----	.1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
650100...	.9	.8	.2	.2	.1	-----	.1	.1	.3	.2	.2	.3	.2
650300...	1.8	1.7	1.6	1.1	1.4	.2	.7	.4	1.2	.6	1.7	1.4	1.6
650400...	.1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
650500...	.3	.1	.2	.1	.2	.1	.1	.1	.1	.1	.2	.1	.1
660000...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
690100...	19.5	24.6	11.7	10.4	15.7	3.4	12.3	9.3	16.2	9.8	13.1	14.3	14.3
690200...	6.3	10.1	1.8	2.2	3.4	.7	2.8	2.2	3.8	3.3	3.4	3.6	2.7
710200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
720200...	.1	.6	.4	.1	.3	.1	.1	1.1	1.9	1.3	.3	2.0	.3
800000...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Total ...	336.3	479.4	205.8	195.8	264.3	69.2	268.6	194.0	279.6	185.9	342.9	275.7	340.0

Table 2.--Detailed Flows of Capital Goods to I-O Industries, 1972
(Millions of dollars--producers' value)
- continued -

	54	55	56	57	58	59	60	61	62	63	64	65	66
60200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
80000...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110101...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110102...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110103...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110104...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110105...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110106...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110107...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110201...	28.2	32.9	80.9	47.1	16.4	150.0	15.1	134.1	57.7	37.9	72.0	-----	-----
110202...	13.8	16.2	38.0	26.9	8.8	80.8	10.9	33.8	18.1	25.5	29.7	122.4	44.9
110203...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	443.9	-----
110204...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110205...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110206...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110207...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110208...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110209...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	91.5	-----
110301...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	*3,235.0
110302...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	*359.0	-----
110303...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110304...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110305...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	*284.0	-----
110501...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110502...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110503...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110504...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
110507...	-----	-----	-----	-----	-----	-----	12.0	-----	-----	-----	-----	23.5	-----
110508...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
130100...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	*80.0
130700...	-----	-----	-----	-----	-----	-----	*.1	-----	-----	-----	-----	-----	-----
170100...	.1	.1	.4	.4	.1	.5	.3	.4	.3	.3	.6	4.2	1.2
170200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	.1	-----
200903...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
220101...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
220102...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
220200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
220300...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
220400...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
230100...	.3	.3	1.3	.7	.2	1.4	.7	.7	.6	.5	1.2	5.9	2.8
230200...	.8	.7	3.2	1.9	.9	4.0	1.8	1.8	1.4	1.6	3.0	16.9	7.1
230300...	-----	-----	.1	-----	-----	-----	.1	-----	-----	-----	-----	*27.1	-----
230400...	.1	.3	.9	.5	.1	1.2	.5	.5	.4	.5	.9	4.4	2.2
230500...	4.2	1.9	7.5	6.3	1.9	23.5	2.9	3.0	3.3	2.3	5.1	8.8	3.2
230600...	-----	-----	.3	.1	-----	.1	.1	.1	.1	.1	.3	.9	.5
230700...	1.1	.7	2.3	1.8	.6	7.4	1.4	2.3	1.4	1.0	2.4	-----	-----
270100...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
320302...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	.5	-----
320400...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	.1	-----
370402...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
381000...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	*64.0
390200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
400600...	.2	-----	.1	.3	.1	5.7	1.4	.2	.1	.3	.1	.5	-----
400700...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	7.2	-----
420202...	.1	.1	.2	.2	.1	.4	.2	.1	.3	.1	.3	-----	-----
420800...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
421100...	-----	-----	.1	-----	-----	.1	.1	.1	-----	-----	.1	.8	.4
430100...	.1	-----	.7	.1	.1	2.1	.3	.7	.1	.9	.1	7.0	-----
430200...	.1	-----	.6	.1	.1	1.4	.2	.5	.1	.6	.1	26.7	-----
440001...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
440002...	-----	-----	-----	.2	-----	.5	.2	.3	.2	-----	.6	2.9	-----
450100...	.1	.1	.1	.2	.1	1.5	.2	.9	-----	-----	.1	4.0	-----
450200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
450300...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
460200...	11.8	7.5	24.7	22.0	6.3	36.6	2.2	3.5	2.5	4.2	3.6	47.7	-----
460300...	3.1	2.2	8.0	7.6	1.7	31.5	1.6	2.6	.4	.6	.7	2.5	-----
460400...	6.7	4.2	17.7	16.8	3.3	119.4	5.6	9.2	2.3	4.0	3.4	45.2	-----
470100...	9.7	32.1	19.6	17.7	4.5	142.9	33.7	10.3	22.8	37.7	23.9	-----	-----
470200...	12.0	24.0	11.3	10.5	2.6	46.1	7.6	3.5	6.6	11.1	25.6	-----	-----
470300...	12.7	16.1	33.4	25.0	5.7	942.2	15.1	9.7	5.0	25.1	23.9	-----	-----
470401...	.6	.4	.8	.9	.5	8.0	.8	4.9	.7	.9	1.1	7.0	.2
470402...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
470403...	2.4	4.2	2.4	2.8	.7	23.7	3.0	5.3	2.0	3.2	4.3	9.2	.2
480100...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
480200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Table 2.--Detailed Flows of Capital Goods to I-O Industries, 1972
(Millions of dollars--producers' value)
- continued -

	54	55	56	57	58	59	60	61	62	63	64	65	66
480300...	----	----	----	----	----	----	----	41.6	----	----	----	----	1.3
480400...	----	----	----	----	----	----	----	----	----	----	----	----	----
480500...	.2	.2	.6	.5	.2	.3	.5	.5	.4	.8	2.3	.5	.5
480600...	5.3	10.6	17.9	51.6	9.7	9.2	5.3	4.5	15.4	10.5	28.8	----	----
490100...	1.8	.9	4.0	3.8	.8	58.9	1.9	11.7	2.0	3.0	3.5	9.5	----
490300...	1.1	.7	2.9	2.7	.6	24.7	1.2	----	----	----	.2	----	----
490600...	.6	.3	.1	2.5	.4	28.4	1.3	1.5	.8	1.8	1.4	----	----
490700...	7.0	1.5	7.1	6.2	1.9	60.8	3.3	4.9	3.5	8.2	23.0	1.9	----
500002...	----	----	----	----	----	----	----	----	----	----	----	----	----
510101...	5.9	6.8	54.3	25.9	7.4	72.2	51.9	16.6	23.2	27.4	15.3	107.3	100.4
510102...	.8	.6	3.8	2.0	.7	5.4	2.7	1.7	1.7	1.8	2.8	16.8	11.4
510200...	.4	.3	1.5	.9	.3	1.5	.8	.5	.7	.8	1.2	4.7	3.2
510300...	----	----	1.3	1.3	----	----	----	.7	.6	1.1	.7	2.9	----
510400...	.5	.5	3.0	1.5	.5	3.6	2.1	1.2	1.6	1.5	1.7	9.2	6.0
520100...	----	----	----	----	----	----	----	----	----	----	----	----	----
520200...	----	----	----	----	----	----	----	----	----	----	----	----	----
520300...	16.9	.9	4.4	2.6	.9	10.2	4.7	8.1	1.4	2.6	1.1	20.7	5.7
520400...	.2	.1	.2	.3	.2	1.1	.4	.5	.2	.2	.3	.4	----
520500...	.6	.2	.8	.9	.2	5.0	.7	.9	.6	.6	1.3	4.3	1.7
530100...	6.2	16.5	101.6	52.5	16.8	4.5	18.3	7.8	13.4	8.6	2.6	10.1	33.4
530200...	----	----	----	----	----	1.2	----	----	----	----	----	7.6	----
530300...	1.5	.7	3.2	3.3	1.0	1.7	3.3	1.9	1.2	1.1	2.2	----	----
530400...	1.4	.6	2.5	2.7	.9	2.3	3.0	1.9	1.3	1.1	1.8	.4	13.4
530500...	.7	.4	1.2	1.1	.2	1.9	1.2	.6	.6	.5	.8	2.8	----
530600...	3.0	1.1	1.8	3.4	1.1	31.7	2.1	16.6	1.0	.6	2.3	5.3	----
530800...	.7	.3	1.4	1.4	.4	.7	1.4	.9	.7	.3	.9	----	----
540100...	----	----	----	----	----	----	----	----	----	----	----	----	----
540200...	----	----	----	----	----	----	----	----	----	----	----	----	----
540300...	----	----	----	----	----	----	----	----	----	----	----	----	----
540400...	----	----	----	----	----	----	----	----	----	----	----	.1	.1
540500...	----	----	.1	.1	----	.3	.1	.1	.1	----	.1	.3	.1
540600...	----	----	----	----	----	.6	----	.1	.1	.2	1.0	----	----
540700...	----	----	----	----	----	----	----	----	----	----	----	----	----
550200...	----	----	.1	.1	----	.4	.2	.1	----	----	.1	----	.1
550300...	----	----	----	----	----	----	----	----	----	----	----	.1	----
560100...	----	----	----	----	----	----	----	----	----	----	----	----	----
560300...	----	----	----	----	----	----	----	----	----	----	----	----	2,725.3
560400...	3.5	9.1	60.0	32.9	9.4	3.2	12.6	7.2	7.8	4.6	1.7	255.2	390.4
570300...	----	.1	.5	.1	----	.1	.2	----	----	----	----	.2	.3
580100...	.5	.3	1.1	1.1	.2	9.2	.5	.7	.2	.3	.2	12.6	27.3
580300...	----	----	----	----	----	5.4	1.6	.5	.8	.5	----	4.2	----
590100...	.3	.1	.3	.3	.1	.7	----	.4	.1	----	.5	317.3	11.2
590200...	.7	.3	.8	.9	.3	1.7	.1	.7	.1	.2	.7	455.3	2.8
590301...	8.8	5.4	20.2	16.6	5.8	37.3	4.0	9.4	49.6	41.9	50.0	2,039.6	73.1
600100...	.7	.3	1.3	1.0	.3	3.0	8.9	2.2	.6	.1	1.4	*1,637.6	.9
600200...	----	----	----	----	----	----	----	----	----	----	----	*111.2	----
610100...	.6	.1	----	.1	----	.3	.2	6.1	----	----	.3	851.8	----
610200...	----	----	----	----	----	----	----	.1	----	----	----	29.0	----
610300...	----	----	----	----	----	----	----	----	----	----	----	*1,491.4	----
610500...	----	----	----	----	----	----	----	----	----	----	----	----	----
610601...	----	----	----	----	----	----	----	----	----	----	----	----	----
610602...	----	----	----	----	----	----	----	----	----	----	----	----	----
610700...	.1	.1	.3	.2	.1	1.1	.2	1.5	.1	.2	.3	1.7	----
620100...	.3	.4	1.7	1.3	.3	2.3	2.6	1.6	1.0	2.0	.9	172.3	.6
620200...	----	.7	----	3.0	.8	1.1	.8	.6	1.4	.6	----	*10.8	.9
620400...	----	----	.3	.1	----	.5	.3	.2	.1	.1	----	.3	.4
620500...	----	----	----	----	----	----	----	----	----	----	----	----	----
620600...	----	----	----	----	----	----	----	----	----	----	----	----	----
620700...	----	----	----	----	----	.1	----	----	----	----	----	----	----
630100...	.2	.6	1.7	1.8	.6	3.3	2.2	1.0	1.8	6.7	2.1	1.0	.3
630300...	2.5	2.2	12.5	6.8	2.1	14.4	7.3	4.8	4.8	12.4	8.4	35.5	23.4
640200...	----	----	----	----	----	----	----	----	----	----	----	----	----
640400...	----	----	----	----	----	----	----	----	----	----	----	----	----
641100...	----	----	.2	----	.1	6.7	----	.7	----	.5	----	23.3	6.4
641200...	----	----	.1	----	----	.1	----	.1	----	----	.1	.4	----
650100...	.1	----	.7	.3	----	3.2	----	.2	.5	.5	.6	56.3	2.2
650300...	1.3	.7	3.2	2.8	.5	16.8	.4	1.2	1.1	.9	1.2	51.3	11.5
650400...	----	----	.1	----	----	.8	----	----	----	----	----	.9	.3
650500...	----	----	.5	.2	.1	2.0	.4	.1	.2	.2	.1	2.0	8.4
660000...	----	----	----	----	----	----	----	----	----	----	----	*2,167.2	----
690100...	9.0	8.3	25.5	19.6	4.6	97.9	16.0	22.2	12.0	16.7	17.4	343.2	86.3
690200...	1.5	.8	4.1	3.3	.7	11.4	1.0	3.2	8.8	7.9	9.1	298.9	10.8
710200...	----	----	----	----	----	----	----	----	----	----	----	----	----
720200...	2.6	.1	.8	.4	.1	1.7	.8	1.3	.2	.4	.2	3.3	1.1
800000...	----	----	----	----	----	----	----	----	----	----	----	*2.2	----
Total ...	195.7	216.8	604.3	450.2	125.1	2,181.9	285.3	419.9	288.1	327.8	393.7	9,967.6	9,170.1

Table 2.--Detailed Flows of Capital Goods to I-O Industries, 1972
(Millions of dollars--producers' value)
- continued -

	67	68	69	70	71	72	73	74	75	76	77	Total
60200...	-----	*198.6	-----	-----	-----	-----	-----	-----	-----	-----	-----	198.6
80000...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	53.4
110101...	-----	-----	-----	-----	*29,212.0	-----	-----	-----	-----	-----	-----	29,212.0
110102...	-----	-----	-----	-----	*2,438.0	-----	-----	-----	-----	-----	-----	2,438.0
110103...	-----	-----	-----	-----	*11,694.0	-----	-----	-----	-----	-----	-----	11,694.0
110104...	-----	-----	-----	-----	*3,884.0	-----	-----	-----	-----	-----	-----	3,884.0
110105...	-----	-----	-----	-----	*7,329.0	-----	-----	-----	-----	-----	-----	7,329.0
110106...	-----	-----	-----	-----	-----	*1,882.0	-----	-----	-----	-----	-----	1,882.0
110107...	-----	-----	-----	-----	-----	*107.0	-----	-----	-----	-----	-----	107.0
110201...	-----	-----	-----	-----	-----	24.4	-----	-----	-----	-----	-----	4,676.0
110202...	20.9	22.7	492.6	529.1	1,159.3	138.0	481.6	57.4	31.1	48.9	283.0	5,269.0
110203...	-----	-----	1,302.6	-----	-----	-----	-----	-----	-----	-----	-----	1,803.0
110204...	-----	-----	32.8	-----	-----	-----	-----	-----	*618.9	-----	-----	656.0
110205...	-----	-----	3,498.9	-----	-----	1,548.8	-----	688.3	-----	-----	-----	5,736.0
110206...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	*844.0	844.0
110207...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	*968.0	968.0
110208...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	*3,172.0	3,172.0
110209...	27.4	-----	-----	-----	-----	-----	-----	-----	-----	380.5	405.5	914.0
110301...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	3,235.0
110302...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	359.0
110303...	-----	*6,992.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	6,992.0
110304...	-----	*1,615.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	1,615.0
110305...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	284.0
110501...	-----	-----	-----	-----	*576.0	-----	-----	-----	-----	-----	-----	576.0
110502...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1,432.0
110503...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	2,340.1
110504...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	372.7
110507...	-----	-----	-----	-----	364.3	-----	-----	-----	94.1	94.1	-----	941.0
110508...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	355.7
130100...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	80.0
130700...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	.1
170100...	.5	.3	*26.4	4.3	*353.7	*105.4	6.5	*11.7	1.1	7.0	*40.9	597.5
170200...	-----	-----	.4	.1	*4.8	1.4	.1	.2	-----	.1	.5	8.2
200903...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	4.8
220101...	-----	-----	-----	-----	46.5	191.4	-----	38.5	-----	3.7	*4.7	284.8
220102...	-----	-----	-----	-----	3.7	17.9	-----	-----	-----	-----	-----	21.6
220200...	-----	-----	-----	-----	34.9	177.6	-----	-----	-----	-----	-----	212.5
220300...	-----	-----	-----	-----	5.7	12.9	-----	24.0	-----	*8.4	-----	51.0
220400...	-----	-----	-----	-----	*19.2	87.4	-----	-----	-----	-----	3.4	110.0
230100...	.7	1.6	47.4	26.0	4.7	5.3	22.3	2.3	1.3	1.5	17.2	193.5
230200...	2.1	4.5	144.0	69.7	12.4	16.9	61.6	4.4	4.2	5.1	38.7	543.4
230300...	-----	-----	.1	.2	-----	3.4	.6	20.3	-----	63.6	71.2	186.8
230400...	.6	1.4	349.3	50.5	3.7	4.0	17.0	1.8	.9	1.3	13.9	491.9
230500...	1.0	2.2	303.9	33.0	5.3	6.6	25.1	3.2	1.4	1.7	20.5	597.2
230600...	.1	.4	5.0	3.9	.8	1.0	3.6	.5	.3	.4	2.8	27.7
230700...	-----	-----	-----	-----	-----	1.1	-----	209.2	-----	8.2	18.9	347.3
270100...	-----	*164.2	-----	-----	-----	-----	-----	-----	-----	-----	-----	164.2
320302...	-----	.7	4.6	.3	2.0	13.3	.5	1.8	-----	1.0	6.7	32.6
320400...	-----	.3	1.5	.2	.7	4.5	.2	.6	-----	.3	2.3	11.6
370402...	-----	1.1	-----	-----	-----	-----	-----	-----	-----	-----	-----	2.1
381000...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	64.0
390200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	13.0
400600...	-----	254.0	55.5	-----	-----	-----	-----	-----	-----	-----	-----	1,059.6
400700...	-----	-----	17.4	-----	-----	-----	-----	*53.0	-----	-----	3.4	137.0
420202...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	30.4
420800...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	490.0
421100...	-----	.5	28.1	156.3	.1	.8	.5	-----	.1	.7	.6	192.8
430100...	-----	1,205.2	-----	-----	-----	-----	-----	-----	-----	-----	-----	1,371.8
430200...	-----	28.2	-----	-----	8.4	-----	-----	-----	-----	*3.8	-----	234.5
440001...	-----	-----	-----	-----	11.0	-----	-----	-----	-----	-----	-----	3,366.7
440002...	.2	3.9	6.0	.5	451.3	25.6	12.8	-----	-----	90.8	34.6	835.0
450100...	-----	1.1	7.1	-----	-----	-----	5.9	.1	-----	-----	-----	3,048.3
450200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	395.6
450300...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	329.7
460200...	-----	1.7	120.2	-----	-----	-----	-----	-----	-----	-----	-----	651.5
460300...	-----	-----	8.2	-----	-----	-----	-----	-----	3.3	-----	-----	179.1
460400...	-----	-----	144.5	-----	-----	-----	-----	-----	-----	-----	-----	809.9
470100...	-----	-----	-----	-----	-----	.4	.1	-----	-----	-----	-----	920.7
470200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	471.6
470300...	-----	-----	-----	-----	-----	-----	-----	-----	.6	-----	-----	1,684.0
470401...	.1	3.3	13.5	.3	.3	5.9	3.7	-----	60.4	1.7	1.4	331.2
470402...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	170.4
470403...	-----	1.4	3.0	.1	-----	4.1	1.2	.4	72.6	.2	.6	300.5
480100...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	707.0
480200...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	864.4

Table 2.--Detailed Flows of Capital Goods to I-O Industries, 1972
(Millions of dollars--producers' value)
- continued -

	67	68	69	70	71	72	73	74	75	76	77	Total
480300...	-----	-----	-----	-----	-----	-----	14.6	-----	-----	-----	-----	339.8
480400...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	269.9
480500...	.2	1.0	3.7	3.1	.1	1.3	11.1	.2	-----	.2	3.2	532.8
480600...	-----	-----	-----	-----	-----	2.9	-----	-----	6.4	-----	-----	1,546.9
490100...	-----	116.8	8.6	.1	.4	7.7	13.5	5.9	20.4	4.7	12.8	918.0
490300...	-----	81.9	-----	-----	-----	-----	-----	-----	-----	-----	-----	244.2
490600...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	287.9
490700...	-----	54.8	2.3	-----	-----	.6	.2	-----	17.7	-----	6.2	719.6
500002...	-----	-----	-----	-----	-----	-----	-----	-----	-----	*38.6	-----	38.6
510101...	2.6	106.1	221.4	664.6	4.6	16.7	704.3	2.6	8.3	4.3	105.7	3,137.9
510102...	1.0	11.2	162.5	127.7	6.8	7.8	50.4	19.3	3.1	3.2	22.3	575.1
510200...	.7	2.1	25.2	29.6	7.4	3.2	24.8	-----	.5	1.0	38.3	186.9
510300...	-----	1.1	43.6	-----	-----	-----	.1	-----	-----	-----	1.5	120.2
510400...	.9	5.1	41.2	60.7	5.4	3.5	44.3	4.3	.7	1.1	27.7	303.1
520100...	-----	-----	232.0	-----	-----	-----	-----	-----	-----	-----	-----	232.0
520200...	-----	-----	-----	-----	-----	*137.4	-----	-----	-----	-----	-----	137.4
520300...	1.4	14.3	397.7	30.4	4.8	36.3	37.9	160.5	2.8	2.6	51.6	1,056.4
520400...	-----	.3	*131.4	-----	-----	-----	-----	-----	8.6	-----	-----	166.0
520500...	.3	5.5	13.2	5.1	29.3	3.6	54.2	*216.6	.5	5.9	60.1	485.8
530100...	62.0	33.1	8.4	2.2	-----	7.9	100.8	-----	.3	4.0	8.2	678.9
530200...	-----	*870.8	-----	-----	-----	-----	-----	-----	-----	-----	-----	979.3
530300...	-----	192.7	-----	-----	-----	-----	-----	-----	-----	-----	-----	659.4
530400...	-----	.1	.3	-----	-----	-----	.2	22.8	-----	-----	-----	365.9
530500...	-----	-----	.2	-----	-----	-----	-----	-----	-----	-----	-----	141.9
530600...	-----	-----	1.1	-----	-----	-----	-----	-----	5.7	-----	-----	259.7
530800...	-----	30.7	-----	-----	-----	-----	-----	-----	-----	-----	-----	224.5
540100...	-----	-----	-----	-----	*283.1	-----	-----	4.7	-----	-----	-----	287.8
540200...	-----	-----	-----	-----	*389.2	1.5	-----	21.4	-----	-----	-----	412.1
540300...	-----	-----	-----	-----	-----	*22.8	-----	-----	-----	-----	-----	22.8
540400...	-----	-----	1.3	.3	*6.2	26.1	.3	*19.1	-----	-----	.3	54.0
540500...	-----	.3	1.0	.3	2.1	.3	3.6	1.1	-----	.4	3.8	17.8
540600...	-----	-----	7.0	-----	-----	5.1	.1	-----	-----	-----	.7	97.5
540700...	-----	-----	-----	-----	*112.6	.3	-----	.2	.1	-----	-----	113.2
550200...	-----	.1	*24.0	-----	.4	30.5	1.2	-----	-----	*2.3	1.8	64.3
550300...	-----	*16.9	-----	-----	-----	-----	-----	-----	-----	-----	-----	17.9
560100...	30.0	-----	-----	-----	36.6	20.6	40.2	2.4	-----	71.9	18.4	220.1
560300...	-----	-----	-----	-----	4.9	16.3	-----	-----	-----	-----	1.2	2,747.7
560400...	142.5	82.2	33.2	7.1	1.1	13.4	111.5	1.7	3.2	5.1	115.8	1,443.8
570300...	5.0	.1	.3	1.0	-----	-----	5.1	-----	-----	-----	.7	14.4
580100...	-----	-----	9.2	-----	-----	-----	-----	-----	-----	-----	-----	95.9
580300...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	289.0	318.0
590100...	.8	131.9	186.8	2.0	1.5	83.1	23.1	3.0	12.0	.4	5.1	1,058.6
590200...	.2	42.9	264.4	1.7	1.6	10.6	20.6	5.5	52.2	-----	3.7	1,087.0
590301...	16.2	382.4	3,578.7	576.2	737.3	728.7	652.2	45.4	827.8	69.1	304.0	14,518.8
600100...	.7	6.8	23.7	5.4	3.4	1.5	25.6	.6	.7	1.0	25.5	1,867.5
600200...	-----	-----	-----	-----	-----	-----	.2	-----	-----	-----	1.0	113.0
610100...	-----	-----	26.3	1.4	-----	2.8	2.1	-----	-----	20.2	9.2	1,038.9
610200...	-----	-----	.8	-----	-----	.1	-----	-----	-----	20.7	.2	105.7
610300...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1,491.4
610500...	-----	-----	-----	-----	-----	-----	21.9	-----	-----	23.9	-----	45.8
610601...	-----	-----	-----	-----	-----	-----	-----	-----	*20.1	-----	-----	20.1
610602...	-----	3.8	3.8	-----	*3,042.2	-----	-----	-----	-----	-----	-----	3,079.6
610700...	-----	-----	-----	-----	-----	.6	-----	-----	*83.2	60.3	-----	164.0
620100...	.1	2.5	6.5	1.5	.6	.7	32.1	.1	.1	3.3	69.0	435.2
620200...	-----	265.9	1.2	-----	-----	-----	-----	-----	-----	-----	59.0	710.6
620400...	-----	.1	2.5	1.1	.2	.5	4.1	-----	-----	1.4	665.3	682.1
620500...	-----	-----	.1	.1	-----	-----	.1	-----	-----	.1	121.2	121.6
620600...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	*169.1	169.1
620700...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1.0
630100...	.2	3.9	3.4	1.1	.1	.5	69.5	-----	-----	.4	32.8	392.9
630300...	13.1	20.5	237.0	241.0	40.8	90.3	263.1	26.9	5.8	38.2	225.3	1,681.6
640200...	-----	-----	-----	-----	-----	-----	-----	2.9	-----	19.0	78.7	100.6
640400...	-----	-----	-----	-----	.6	*13.2	-----	.4	-----	173.4	34.4	222.0
641100...	10.1	15.6	34.0	54.1	3.2	16.2	9.4	25.6	1.0	11.2	17.6	306.8
641200...	-----	-----	4.1	.4	11.2	29.0	.4	47.9	.4	35.2	4.0	136.3
650100...	.4	30.8	63.6	10.9	38.1	16.1	11.7	13.2	11.2	4.5	8.9	406.7
650300...	1.3	51.7	101.5	20.6	39.8	23.3	18.9	22.2	15.6	16.2	19.4	696.2
650400...	-----	2.2	4.9	.9	5.0	.7	.4	.9	.5	1.2	1.0	28.5
650500...	.2	8.8	7.2	7.1	.5	.8	7.0	1.0	.3	1.1	6.8	81.3
660000...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	2,167.2
690100...	15.2	214.8	599.4	225.9	314.0	189.8	249.1	155.8	120.6	132.1	654.9	6,058.3
690200...	3.3	49.9	583.7	106.5	1,090.8	119.5	115.6	13.1	160.9	31.7	90.6	3,439.6
710200...	-----	-----	-----	-----	*697.9	-----	-----	-----	-----	-----	-----	697.9
720200...	.2	2.3	76.4	5.5	.9	6.8	6.6	28.1	.5	.5	9.2	191.5
800000...	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	4.6
Total ...	362.2	13,368.3	13,791.8	3,070.1	64,550.5	6,087.9	3,418.0	1,970.3	2,281.5	1,533.4	9,340.0	185,823.4

appendix A. The using industries are indicated in table 1 by number signs (#) preceding the two-digit I-O industry code. Note that new construction (I-O 11) and maintenance and repair construction (I-O 12) have been combined in the study and appear as column 11, construction, in the CFT. Also, government enterprises (I-O 78 and 79) are not a part of the CFT, because their acquisition of capital is not part of GPDI in the NIPA's. Therefore, there are 76 using industries in the CFT's.

Producers' versus purchasers' values

The flows of capital to using industries can be valued in either producers' or purchasers' values, with the difference, if any, being the value of the transportation costs and wholesale and retail trade margins added as the good goes from producer to user. Table 2 appears in producers' values, as do the published 1972 I-O tables. Hence, each using industry is shown as purchasing up to six transportation or margin services (i.e., rail freight (I-O 65.0100), motor freight (I-O 65.0300), water transportation (I-O 65.0500), air transportation (I-O 65.0500), wholesale trade margin (I-O 69.0100), and retail trade margin (I-O 69.0200)). The amount of a given transportation cost or trade margin shown for each using industry is the grand total of that transportation cost or trade margin paid on all of the new capital goods acquired by that using industry. For example, the food and kindred products industry (I-O 14) is shown as making one purchase of a particular transportation service rather than separate purchases for each capital good commodity it uses. Thus, in table 2 the list of capital goods shown in appendix A is augmented by these six transportation and trade services.

User basis for allocating capital goods

There are two ways to allocate the flow of capital goods: to their purchasers or to their users. They differ because of leasing. The user criterion was adopted in this CFT. One reason is that it could be implemented better; only limited data are available to divide capital goods destined for use by an industry between those it buys itself and those purchased by other industries and leased to it. The other reason is that ownership is frequently an institutional or financial rather than a technical consideration in the acquisition of capital goods, so that ownership over time can be affected by changes that may be more volatile than those affecting technology.

The practice of leasing structures and equipment is growing and is important in the acquisition of structures, transportation equipment, computers, etc. It should be noted that showing the acquisition of capital goods on a user basis is not completely consistent with the treatment of current costs of capital in the I-O use table, where depreciation of owned capital is part of value added and rental payments for structures and equipment are made to rental industries; e.g., for structures, to the real estate and rental industry (I-O 71); for equipment, to the business services industry (I-O 73); and for autos and trucks, to the automobile repair and services industry (I-O 75). 4/

4/ I-O 75 was considered the capital using industry in cases of short-term rental of autos and trucks and receives an allocation of automotive equipment to provide this service. It should also be noted that structures and equipment acquired by governmental units on a rental basis have been allocated to the rental industries as users in the CFT, because the capital goods involved are part of GPFCF, but the governmental users are not within the scope of this study.

Except for the cases cited, it is felt that the differences in the allocation of new capital equipment on a user basis in the CFT and the allocation of rents to owners of capital goods in the I-O use table would have little impact on analysis involving the relation of capital outlays and capital consumption for most industries.

Comparison with 1967

The detailed CFT for 1972 differs from that published for 1967 in a number of ways. The most obvious differences are noted here and a more detailed discussion is given in appendix C. The 1972 I-O and capital flow tables are based on the *Standard Industrial Classification Manual 1972* (SIC) rather than the 1967 SIC. The 1972 CFT is published in six-digit I-O detail rather than the four-digit detail used in the 1967 study. However, it can be readily aggregated to four-digit I-O detail for more comparability with the 1967 CFT.

Three new capital goods have been included in GPFCF and appear for the first time in the 1972 CFT: uranium ore (I-O 6.0200) acquired by private electric utilities (I-O 68.0100) has been capitalized; similarly conversion, enrichment, and fabrication of uranium ore for reactors under contract by I-O 27 and I-O 37 for I-O 68.0100 have been capitalized. Installation of petroleum mining equipment by the crude petroleum and natural gas mining industry (I-O 8.0000) is now capitalized. Also, installation of machinery by repair and service establishments (I-O 72.0200) is capitalized.

The treatment of imports comparable to U.S. products in the 1972 I-O tables differs from earlier tables. Previously, imported finished capital goods were allocated directly to GPFCF from I-O 80 without being associated with the comparable domestic product. In the 1972 I-O tables, they have been added to the total supply of the commodity that has been allocated to GPFCF, without distinguishing the domestic or foreign origin. This has reduced the allocation on row 80.0000 to GPFCF in the 1972 CFT to very small amounts. Accordingly, one margin item that appears in the 1967 CFT, insurance on transferred imports (I-O 70.0400), is negligible in 1972 and does not appear in the new CFT.

II. *Methodology*

The capital flow study starts with the allocations to GPDFI of new domestically produced and imported products at the most detailed product level, available only on computer tape from the 1972 I-O study. ^{5/} Net purchases of scrap, used, and secondhand goods are excluded, as are real estate commissions on sales of existing structures. The exclusions raise the equipment total, particularly because of large sales of motor vehicles from business to consumers. The effect of the exclusions on GPDFD is as follows:

^{5/} The tape covers product detail for both producers' durable equipment and personal consumption expenditures; the order number is BEA IED 79-010; the cost is \$200.00.

	<u>Total</u>	<u>Structures</u>	<u>Equipment</u>
	<u>(Millions of dollars)</u>		
Gross private fixed capital formation -----	184,931	106,122	78,809
Less: Scrap, used, and secondhand goods and real estate commissions on sale of existing structures -----	<u>-892</u>	<u>2,335</u>	<u>-3,227</u>
Gross private fixed new capital formation -----	185,823	103,787	82,036

A few of the commodities in the original study have been combined in the capital flow study, because it was not deemed useful to allocate them separately to using industries. Accordingly, there are 606 products distributed to 76 using industries in the detailed 1972 CFT that is available on computer printouts and magnetic tapes. (See footnote 3.) The products are listed in appendix A. The final matrix thus consists of 606 rows and 76 columns in which each cell contains an estimate of the producers' value of the commodity allocated to an industry or the trade margins and transport costs that must be added to the producers' value to obtain the purchasers' value. In addition, an evaluation of the quality of the estimate in the cell is included to assist the user in judging the adequacy of the estimates for his purposes. The layout of the information on the magnetic tape containing capital flow data is described in appendix D.

In the final estimates from which the tables are prepared, the detailed estimates for the users of each commodity sum to the original allocation made to GPFCF in the I-0 use table, which was controlling for the capital flow study.

The estimates entering the capital flow table were prepared in four steps. The first two involved making the initial distribution of the capital goods (commodities) to using industries (the initial flow estimates) and the estimates of expenditures of the using industries for structures and for equipment. Both sets of estimates were made in purchasers' values and the steps proceeded independently. The third step was to reconcile the two sets of estimates. The fourth step was to estimate the transportation costs and trade margins and to prepare the CFT in producers' values. The procedures and sources used in each step are discussed in the following sections.

A. *Initial capital flow estimates*

The initial estimates of the flow of capital goods to using industries were made at the detailed (606) commodity level. The description of the information contained in the study and the methods and sources used in making initial estimates in this detail is quite lengthy and has been assembled in appendix A.

There was, unfortunately, little direct information on the acquisition of new structures and items of capital equipment by industry on which to base the flow estimates. Very rarely were survey or other relatively direct user data available to guide the distribution of the individual products.

The more reliable allocations are those for which there was only one obvious user of the commodity, or for which the commodity could be broken down into more detailed products, with each having a specific user. For most commodities, however, there were several or many users of the capital good and the analysts had to use indirect procedures to distribute the commodity. Thus, a wide variety of prorating schemes were developed to judge the relative importance of industries as users of the various commodities. Allocations were based on such factors as employment in certain occupations, consumption of water or electricity, and truck mileage. Such indicators of the use of capital goods were used as proxies for the relative importance of industries in acquiring capital goods. It was assumed that the factors used for proration were correlated with acquisition of capital goods by industries, but it is recognized that the resulting estimates are not necessarily accurate.

To assist users of the capital flow data in judging whether the allocation of a particular product or commodity group is adequate for their research needs, the procedures used to estimate each cell (product by industry) were given a classification ranging from 1 to 7, indicating degrees of reliability (see table 3). All the initial capital flow estimates described in this section and in appendix A were classified from 1 to 6; all the changes necessitated by the reconciliation process described below were classified 7. In preparing table 2, which is aggregated from the more detailed commodity estimates, the percentage of each cell's value that was estimated by procedures 1 or 2 was calculated. Since this percentage was usually either very high or low, the information was summarized by flagging a cell with an asterisk if more than 85 percent of the cell's value was estimated by procedures 1 or 2. The asterisk should not be taken as an indication of complete reliability, however, as the capital flow estimates are also dependent on the underlying accuracy of the GPDFI capital goods estimates.

B. *New capital expenditures by industry*

The initial estimates of the flow of capital goods to industries were based to a greater or lesser degree on allocators that reflect the relative use of capital goods by the various industries. Factors other than use also influence the amount of a capital good that is acquired by an industry in any particular year. For example, some industries may be growing faster than others, or may be more profitable, or may have a relatively older stock of certain types of capital goods needing replacement. Therefore, when the initial capital flow allocations to an industry are summed, the total may not reflect the actual acquisition of structures and equipment by the industry. As a check upon these industry totals, independent estimates of the industry distribution of capital expenditures were also prepared.

Inasmuch as there was no comprehensive set of data relating to investment in new structures and equipment by individual industries in the U.S. economy that could be adapted to the I-O format of this study, the estimates were compiled from several sources. It was necessary to modify and to supplement existing data to account for incomplete coverage, lack of comparable industrial detail, and differences in the organizational composition of units reporting the data. As nearly as possible, the modifications fill gaps, eliminate duplication, and conform the estimates to the definitions and conventions used in the I-O table, the NIPA's, and the ground rules adopted for compiling the capital flow tables.

Table 3.--Procedures Used in Estimating
the 1972 Capital Flow Table

Class number	Identification
1	<p>A product or a well-estimated portion of a product that is allocated to one industry. A small amount (less than 5 percent) may be taken off for purchases by other industries. These smaller allocations are classed according to their own estimation procedures.</p> <p>The few cases when survey data on capital goods were available are also classed "1."</p>
2	<p>A large residual (more than 50 percent of a product code) that is allocated to one industry after specific allocations to other industries have been made.</p>
3	<p>An allocation that is based on the "guesstimate" of a private industry analyst or on an extrapolation from the sales pattern of a major producer.</p> <p>A product or portion of a product that is prorated across old, partial, or otherwise inadequate survey statistics.</p>
4	<p>A product or portion of a product that is distributed to four or less industries by the analyst's judgment or by prorating across the numbers employed within certain occupations within those industries</p>
5	<p>A product that is prorated across more than four selected industries according to the numbers employed within certain occupations within those industries.</p> <p>A residual--after other allocations from a product--that is prorated across a few industries using specific occupational patterns.</p> <p>A product prorated across consumption of electricity, water usage, truck mileage, etc.</p>
6	<p>Analyst's guess (little basis).</p> <p>A product that is prorated by some general indicator of industrial activity (e.g., capital consumption allowances or new equipment expenditures) instead of a statistic more directly related to the usage of the product under consideration.</p> <p>Miscellaneous or other non-specified receipts that are prorated across the sum of the usage by industry of similar products.</p>
7	<p>Final reconciliatory adjustments made to conform to the expenditure controls by industry for structures and for new equipment.</p>

Table 4 organizes the estimates of expenditures for new structures and equipment into industry divisions, showing the components for each estimate. The footnotes to table 4 give the data sources. The table also provides a reconciliation of the unexplained differences between the grand totals of these expenditure estimates and the GPDFI figures from the I-O table, which are the basis for the capital flow analysis described in the previous sections. The scope of some industries was redefined or otherwise adjusted in the I-O study; thus, the capital expenditure estimates also needed adjustments to conform. These are discussed below and the amounts involved are given in table 5. In the following section, the capital expenditure estimates and the capital flow estimates for the 76 I-O industries are compared and reconciled. This reconciliation forms the basis for the final estimates of transactions in new structures and equipment by industry.

The principal source for the expenditure estimates was the *1972 Economic Censuses*, which collect and report data for establishments, grouped according to the SIC, which is the basis for defining and classifying industries in the I-O study. Data are reported on industry expenditures made during the year for permanent additions and major alterations to their plants, as well as for new machinery and equipment purchases that were chargeable to fixed asset accounts of the establishments and were of a type for which depreciation accounts are ordinarily maintained. Expenditures for machinery and equipment include replacements of and additions to plant capacity. The capital expenditures include those made at plants that were in operation during any part of the year or that were under construction but not yet producing. Capital expenditures on an establishment basis are reported in the following Bureau of the Census publications:

1972 Census of Mineral Industries
1972 Census of Construction Industries
1972 Census of Manufactures
1972 Census of Wholesale Trade
1972 Census of Retail Trade
1972 Census of Selected Service Industries
1972 Enterprise Statistics, Part 2; Central
 Administrative Offices and Auxiliaries

The major source of information relating to structures is the Bureau of the Census, *Construction Reports: Value of New Construction Put in Place, 1947-1974* (C30-74S). This series contains data on construction by type, many of which can be associated with specific I-O industries; e.g., farm service facilities, residential structures, railroads, petroleum pipelines, telephone and telegraph facilities, electric utility facilities, gas utility facilities, hospital and institutional buildings, educational buildings, and religious buildings. Note that for some types of construction the allocation to GPDFI is less than total reported for that type, because part of the construction was acquired by government and government enterprises, which are not included in this study.

Published and unpublished data from the BEA plant and equipment expenditure survey were also incorporated into the study, mainly for nonmanufacturing industries. These BEA estimates are compiled on a company basis, with the company classified according to the activity of its principal establishments.

Table 4.--Estimates of New Capital Expenditures by Industry Division and
Reconciliation with Gross Private Fixed Capital Formation, 1972
(Millions of dollars--purchasers' value)

Industry number and title		Total	Structures	Equipment
AGRICULTURE, FORESTRY, AND FISHERIES:				
I-0 01, 02	Agriculture -----	6,619.0	1,432.0 <u>a/</u>	5,187.0 <u>b/</u>
I-0 03, 04	Forestry and fishery products, and agricultural, forestry, and fishery services <u>c/</u> -----	667.0	100.0	567.0
I-0 01-04	Computers rented and not included in Census expenditures for equipment <u>d/</u> -----	4.8	-----	4.8
I-0 02, 03	Rebuilt equipment shipped by manufacturers <u>e/</u> -----	7.6	-----	7.6
		<u>7,298.4</u>	<u>1,532.0</u>	<u>5,766.4</u>
MINING:				
I-0 05-10	Operating establishments <u>f/</u> -----	2,808.0	698.5	2,109.5
I-0 08	Oil and gas well drilling <u>g/</u> -----	2,340.1	2,340.1	-----
	Exploration for oil, gas, and solid minerals <u>g/</u> -----	372.7	372.7	
	Access structures for solid mineral development <u>g/</u> -----	355.7	355.7	-----
I-0 05-10	Central office and auxiliary units <u>h/</u> -----	131.0	51.0	80.0
I-0 05-10	Computers rented and not included in Census expenditures <u>d/</u> -----	22.7	-----	22.7
	Rebuilt equipment shipped by manufacturers <u>e/</u> -----	1.8	-----	1.8
I-0 05-10	Nonfarm business use of personal autos <u>i/</u> -----	52.4	-----	52.4
		<u>6,084.4</u>	<u>3,818.0</u>	<u>2,266.4</u>
CONSTRUCTION:				
I-0 11, 12	Operating establishments <u>j/</u> -----	3,484.0	573.0	2,911.0
I-0 11, 12	Central office and auxiliary units <u>h/</u> -----	32.0	23.0	9.0
I-0 11, 12	Rebuilt equipment shipped by manufacturers <u>e/</u> -----	6.7	-----	6.7
I-0 11, 12	Nonfarm business use of personal autos <u>i/</u> -----	151.8	-----	151.8
		<u>3,674.5</u>	<u>596.0</u>	<u>3,078.5</u>

Table 4.--Estimates of New Capital Expenditures by Industry Division and
Reconciliation with Gross Private Fixed Capital Formation, 1972
(Millions of dollars--purchasers' value)

- continued -

Industry number and title		Total	Structures	Equipment
MANUFACTURING:				
I-0 13-64	Operating establishments <u>k/</u> -----	24,076.9	5,371.1	18,705.8
I-0 13-64	Central office and auxiliary units <u>h/</u> -----	1,702.0	518.0	1,184.0
I-0 13-64	Manufacturers' sales offices <u>l/</u> --	156.0	89.5	66.5
I-0 13-64	Computers rented and not included in Census expenditures <u>d/</u> -----	414.6	-----	414.6
I-0 13-64	Rebuilt equipment shipped by manufacturers <u>e/</u> -----	62.4	-----	62.4
I-0 13-64	Nonfarm business use of personal autos <u>i/</u> -----	577.0	-----	577.0
		<u>26,988.9</u>	<u>5,978.6</u>	<u>21,010.3</u>
TRANSPORTATION:				
I-0 65	Railroads <u>m/</u> -----	1,497.0	359.0	1,138.0
I-0 65	Petroleum pipelines <u>n/</u> -----	361.0	284.0	77.0
I-0 65	Transportation except railroads and petroleum pipelines <u>c/</u> -----	4,881.0	446.0	4,435.0
I-0 65	Computers rented and not included in Census expenditures <u>d/</u> -----	46.5	-----	46.5
I-0 65	Rebuilt equipment shipped by manufacturers <u>e/</u> -----	248.5	-----	248.5
I-0 65	Nonfarm business use of personal autos <u>i/</u> -----	424.4	-----	424.4
		<u>7,458.4</u>	<u>1,089.0</u>	<u>6,369.4</u>
COMMUNICATIONS:				
I-0 66	Telephone and telegraph <u>o/</u> -----	10,030.0	3,235.0	6,795.0
I-0 66	Communications, n.e.c. <u>c/</u> -----	223.0	72.0	151.0
I-0 67	Radio and TV broadcasting <u>c/</u> -----	286.0	132.0	154.0
I-0 66, 67	Computers rented and not included in Census expenditures <u>d/</u> -----	44.1	-----	44.1
I-0 66, 67	Nonfarm business use of personal autos <u>i/</u> -----	17.9	-----	17.9
		<u>10,601.0</u>	<u>3,439.0</u>	<u>7,162.0</u>
ELECTRIC, GAS, AND SANITARY SERVICES:				
I-0 68	Electric utilities <u>p/</u> -----	12,674.0	6,992.0	5,682.0
I-0 68	Gas utilities <u>q/</u> -----	2,532.0	1,615.0	917.0
I-0 68	Water and sanitary services <u>c/</u> ---	333.0	315.0	18.0

Table 4.--Estimates of New Capital Expenditures by Industry Division and
Reconciliation with Gross Private Fixed Capital Formation, 1972
(Millions of dollars--purchasers' value)
- continued -

Industry number and title		Total	Structures	Equipment
ELECTRIC, GAS, AND SANITARY SERVICES: CON.				
I-0 68	Computers rented and not included in Census expenditures <u>d/</u> -----	31.0	-----	31.0
I-0 68	Rebuilt equipment shipped by manufacturers <u>e/</u> -----	0.3	-----	0.3
I-0 68	Nonfarm business use of personal autos <u>i/</u> -----	10.1	-----	10.1
		<u>15,580.4</u>	<u>8,922.0</u>	<u>6,658.4</u>
WHOLESALE AND RETAIL TRADE:				
I-0 69	Merchant wholesalers <u>r/</u> -----	2,513.0	743.0	1,770.0
I-0 69	Manufacturers' sales branches and assemblers of farm products <u>s/</u> -	873.0	255.0	618.0
I-0 69	Petroleum bulk plants <u>t/</u> -----	949.0	256.0	693.0
I-0 69	Retail trade <u>u/</u> -----	6,025.0	2,479.0	3,546.0
I-0 69	Computers rented and not included in Census expenditures <u>d/</u> -----	95.4	-----	95.4
I-0 69	Rebuilt equipment shipped by manufacturers <u>e/</u> -----	4.0	-----	4.0
I-0 69	Nonfarm business use of personal autos <u>i/</u> -----	1,079.2	-----	1,079.2
		<u>11,538.6</u>	<u>3,733.0</u>	<u>7,805.6</u>
FINANCE, INSURANCE, AND REAL ESTATE:				
I-0 70	Finance and insurance companies <u>c/</u> -----	5,318.1	3,088.9	2,229.2
I-0 71	Real estate and rental companies <u>c/</u> -----	6,335.0	5,466.0	869.0
I-0 71	Residential construction <u>v/</u> -----	55,133.0	55,133.0	-----
I-0 71	Mobile homes <u>w/</u> -----	3,964.6	3,964.6	-----
I-0 71	Landlord durables <u>i/</u> -----	1,536.1	-----	1,536.1
I-0 71	Real estate commissions, new residential buildings <u>i/</u> -----	687.0	687.0	-----
I-0 71	Residential equipment <u>x/</u> -----	490.0	-----	490.0
I-0 70, 71	Computers rented and not included in Census expenditures <u>d/</u> -----	283.9	-----	283.9
I-0 70, 71	Rebuilt equipment shipped by manufacturers <u>e/</u> -----	0.3	-----	0.3
I-0 70, 71	Nonfarm business use of personal autos <u>i/</u> -----	580.9	-----	580.9
		<u>74,328.9</u>	<u>68,339.5</u>	<u>5,989.4</u>

Table 4.--Estimates of New Capital Expenditures by Industry Division and
Reconciliation with Gross Private Fixed Capital Formation, 1972
(Millions of dollars--purchasers' value)
- continued -

Industry number and title	Total	Structures	Equipment
SERVICES:			
I-0 72, 73, Operating establishments 75, 76 excluding professional services (73.03) <u>y/</u> -----	7,060.0	2,307.0	4,753.0
I-0 74 Eating and drinking places <u>u/</u> -----	1,226.0	601.0	625.0
I-0 73 Miscellaneous professional services <u>c/</u> -----	788.0	227.0	561.0
I-0 77 Hospitals and sanatoria buildings <u>z/</u> -----	3,172.0	3,172.0	-----
I-0 77 Education buildings <u>z/</u> -----	968.0	968.0	-----
I-0 77 Dormitories <u>aa/</u> -----	107.0	107.0	-----
I-0 77 Religious organization buildings <u>z/</u> -----	844.0	844.0	-----
I-0 77 Hospitals and sanatoria <u>ba/</u> -----	833.0	-----	833.0
I-0 77 Other medical services <u>c/</u> -----	634.0	216.0	418.0
I-0 77 Educational services <u>ba/</u> -----	552.0	-----	552.0
I-0 77 Nonprofit membership organizations <u>c/</u> -----	1,395.0	943.0	452.0
I-0 75 Expensed autos <u>c/</u> -----	279.0	-----	279.0
I-0 72-77 Computers rented and not included in Census expenditures <u>a/</u> -----	361.0	-----	361.0
I-0 72-77 Rebuilt equipment shipped by manufacturers <u>e/</u> -----	9.6	-----	9.6
I-0 72-77 Nonfarm business use of personal autos <u>i/</u> -----	683.2	-----	683.2
	<u>18,911.8</u>	<u>9,385.0</u>	<u>9,526.8</u>
Total estimated capital expenditures -----	182,465.3	106,832.1	75,633.2
Unexplained difference -----	3,358.1	-3,045.3	6,403.4
Gross private fixed new capital formation -----	185,823.4	103,786.8	82,036.6
Scrap, used, and secondhand goods and commissions on existing structures -----	-892.5	2,335.0	-3,227.5
Gross private fixed capital formation -----	184,930.9	106,121.8	78,809.1

Table 4 footnotes

- a/ Source is the output of I-0 construction industry 11.0502, Farm service facilities. Data are from U.S. Bureau of the Census, *Construction Reports: Value of New Construction Put in Place: 1947-1974* (C30-74S). Allocation to the separate industries in agriculture was based on unpublished information on depreciation supplied by the U.S. Department of Agriculture.
- b/ Source is an unpublished estimate from the investment series compiled by the National Income and Wealth Division of BEA from data supplied by the U.S. Department of Agriculture. The basis for allocation to separate industries in agriculture is the same as for a/ above.
- c/ Source of estimates for structures and equipment is unpublished data from BEA's plant and equipment expenditure series.
- d/ Estimates are based on an industry analyst's estimate that in 1972 about 50 percent of the value of computers was leased to users by their manufacturers.
- e/ Data on shipments of rebuilt equipment are from the *1972 Census of Manufactures*. The products were allocated to industries in the same way as comparable new equipment was allocated in the capital flow estimates.
- f/ Estimates for structures and equipment are based on data from the *1972 Census of Mineral Industries: Industry Statistics*, table 3A, for each mining industry. The data were adjusted to cover establishments without payroll.
- g/ The value for structures is the output of the I-0 construction industries for oil and gas well drilling (I-0 11.0503) and oil and gas exploration (I-0 11.0504). The estimate, which represents the value of construction up to and including the Christmas tree, is based on data from the *1972 Census of Mineral Industries: Industry Statistics*, Oil and Gas Field Operations, Section 13A, table 6D. Data were adjusted to include establishments with less than five employees and further adjusted for undercoverage using data on total footage drilled reported in the "1972 Joint Association Survey" sponsored by the American Petroleum Institute and the Independent Petroleum Association.
- h/ Data on new capital expenditures by central administrative offices and auxiliaries are from the Bureau of the Census, *1972 Enterprise Statistics*, Part 2; Central Administrative Offices and Auxiliaries, table 1-3. Detail on the split between expenditures for new structures and new machinery and equipment for major industry groups is given in table 4-1 of the cited source.
- i/ Estimates were made by the Interindustry Economics Division and the National Income and Wealth Division of BEA.
- j/ Data on structures and equipment purchased by operating establishments in construction are from the *1972 Census of Construction Industries, Volume I: Industry and Special Studies*, U.S. Summary, table 3.2. Data for oil and gas field services, classified as construction rather than mining in the I-0 table, are from the *1972 Census of Mineral Industries, Industry Statistics*, Oil and Gas Field Services, 13-6, table 3A. Data were adjusted to include expenditures by establishments without payrolls.

Table 4 footnotes (con.)

- k/ Source of data for expenditures for structures and equipment by manufacturing establishments is the *1972 Census of Manufactures, Volume I, Subject and Special Statistics*, Manufacturers' Expenditures for Plant and Equipment, table 1.
- l/ Manufacturers' sales offices (MSO) have been redefined from trade to manufacturing in the I-O study. Since they carry no stocks of goods, their investment in structures and equipment is estimated at one-half the investment per employee in manufacturers' sales branches (MSB). See footnote s/ for explanation of the MSB estimate. Employment data for MSO's and MSB's are from the *1972 Census of Wholesale Trade, Volume I, Subject Statistics*, part 4, table 12.
- m/ Total new capital expenditures for railroads is an unpublished estimate from the BEA plant and equipment series. The estimate for structures is the output of I-O construction industry 11.0302, Railroads. Data are from *Construction Reports: Value of New Construction Put in Place: 1947-1974*. The equipment figure is the residual.
- n/ The estimate for structures is the output of I-O construction industry 11.0305, Petroleum pipelines. Data are from the same source as m/. The estimate for equipment is based on unpublished information on capital expenditures obtained by the Construction Division of the Bureau of Census from the Interstate Commerce Commission in conjunction with estimating the construction component. The data were adjusted to include intrastate pipelines.
- o/ The estimate for structures is the output of I-O construction industry 11.0301, Telephone and telegraph facilities. Construction data are from the same source as in m/ but have been adjusted to exclude imputed interest on funds used during construction, in conformity with national accounting procedures. The reports obtained from the industry by the Bureau of the Census from which they compile the construction estimate also contain information on expenditures for equipment which was made available for use in this study.
- p/ The estimate for structures is the output of I-O construction industry 11.0303, Electric utility facilities. The construction data, from the same source as in footnote m/, have been adjusted to exclude interest allowed for funds used during construction. Unpublished data supplied to the Bureau of the Census by the Federal Power Commission and the Rural Electrification Commission for use in making the construction estimate also contained information on expenditures for equipment which were made available for use in their report. They were adjusted to cover expenditures by Class C, D, and E electric utilities and the electric portion of joint gas and electric utilities by applying the same factors used in making the construction estimates.
- q/ The estimate for structures is the output of I-O construction industry 11.0304, Gas utility facilities. The construction data, from the same source as in footnote m/, were adjusted to exclude interest allowed for funds used during construction. Sources of data used to compile the construction estimate contained information on expenditures for equipment which were made available by the Bureau of the Census for use in this study.

Table 4 footnotes (con.)

- r/ Source of data is the *1972 Census of Wholesale Trade, Volume I, Summary and Subject Statistics*, Capital Expenditures of Merchant Wholesalers, table 9, pp. 3-16.
- s/ Investment by manufacturers' sales branches (MSB) was estimated by using the ratio of investment by merchant wholesalers in structures and equipment (see r/ above) to their sales in 1972 applied to sales by sales branches in 1972. The calculation was carried out in detail by kind of business. Data on sales by merchant wholesalers and by MSB's are from the *1972 Census of Wholesale Trade, Volume I, Subject Statistics*, part 4, tables 1 and 12. Since data for assemblers of farm products in wholesale trade are not available for 1972, their expenditures were estimated using the ratio of sales by assemblers to sales by merchant wholesalers in 1967 applied to investment of merchant wholesalers in 1972.
- t/ The basic source is the *1972 Census of Wholesale Trade, Volume I, Summary and Subject Statistics*, Subject Statistics, Petroleum Bulk Stations and Terminals, table 10. The data were adjusted for undercoverage using the ratio of total sales to the sales of those plants reporting capital expenditures. Sales data are from tables 1 and 10.
- u/ The source is the *1972 Census of Retail Trade, Volume I, Summary and Subject Statistics*, Subject Statistics, "Capital Expenditures, Fixed Assets, and Rental Payments," table 1.
- v/ The estimate for structures equals output of the residential construction industries (I-0's 11.0101 to 11.0105 and 11.0501). The estimates were derived from data contained in *Construction Reports: Value of New Construction Put in Place: 1947-1974*. Data for 1972 were adjusted to reflect revisions to the series which were made starting in 1973. The adjustment was based on published Census Bureau data that reflect the revised concepts and methods. For instance, the new data include an estimate for tenant performed additions and alterations.
- w/ Estimated by the Interindustry Economics Division, BEA, from data contained in the *1972 Census of Manufactures*.
- x/ This is an estimate of purchased lawn mowers, which are considered as residential investment.
- y/ Expenditures for new facilities in total are from the *1972 Census of Selected Service Industries: Miscellaneous Subjects*, Capital Expenditures and Other Financial Data, table 27a. The detail for structures and for equipment were obtained from an unpublished tabulation by the Bureau of the Census, "1972 Estimates of Capital Expenditures, Fixed Assets, Rental Payments and Labor Costs for Selected Service Industries." Adjustments were made to account for undercoverage in the Census data of rooming and boarding houses and lodging houses operated by membership organizations.

Table 4 footnotes (con.)

- z/ The estimate for structures is the output of the corresponding construction industry in the 1972 I-0 table. The data on new construction are published in *Construction Reports: Value of New Construction Put in Place: 1947-1974*.
- aa/ The estimate for structures is the output of I-0 construction industry 11.0107. The dormitory portion of nonhousekeeping residential buildings, shown in *Construction Reports: Value of New Construction Put in Place: 1947-1974*, was split from a total including several building types using F.W. Dodge data on contract awards.
- ba/ Equipment for educational services was obtained by subtracting educational structures from an unpublished estimate of total investment for education and museums, from the BEA plant and equipment survey.

Generally, capital expenditures are reported by the company making the purchase and retaining title, even though a portion of the new capital may be destined for use by its establishments classified in other industries. Although the company reporting basis is not strictly in accord with the capital flow study, no attempt was made to convert the data to an establishment basis, because the limitation was felt not to be significant for the nonmanufacturing industries for which the data were used.

Unpublished estimates from various sources indicated in table 4 helped fill gaps in published information. In some cases, estimates for equipment purchases are residuals from data on total capital expenditures and the acquisition of structures.

In table 4, the following four items were added to the conventionally reported expenditures for new equipment in accordance with NIPA procedures:

1. *Nonfarm business use of personal autos.*--A portion of personally owned autos used for business is defined as part of gross private domestic investment in the NIPA's. Accordingly, an estimate was made to include them in the estimates of capital expenditures for the nonagriculture industries. The agricultural portion was included in the U.S. Department of Agriculture data on equipment purchases used in this report.
2. *Computers rented and not included in Census expenditures.*--The value of new computers retained by the manufacturers and leased to other industries was estimated and added to the capital expenditures of the using industries.
3. *Expensed autos.*--An estimate of the value of autos that were expensed by the auto rental industry because they were retained for less than a full accounting period was added to the capital expenditures of the service industry.
4. *Rebuilt equipment shipped by the manufacturer.*--The sale and acquisition of used capital goods and real estate commissions on the sale of existing properties were not included in the capital flow study. However, certain equipment normally is rebuilt at the factory and reported in the value of shipments in the Census of Manufactures. These items are included in producers' durable equipment and in the capital flow estimates and hence are added here to the reported expenditures for new equipment.

Redefinitions and other adjustments.--In the I-O study, the output of industries was often modified by redefining secondary output and related inputs from the industry producing the secondary product to the primary producer of that product. Accordingly, in the capital flow study, expenditures for the new capital purchases associated with redefined activities were estimated and shifted from the secondary to primary producer of the product. Thus, the estimates of new capital expenditures for structures and equipment summarized in table 5 have been adjusted by the net redefinitions and other adjustments into and out of industries. ^{6/} The estimates of the capital

^{6/} See *Definitions and Conventions of the 1972 Input-Output Study*, chapter VIII, BEA Staff Paper 80-034, July 1980.

Table 5.--New Capital Expenditures by Industry Division
Including Redefinitions and Adjustments, 1972
(Millions of dollars--purchasers' value)

Industry number and title	Total	Structures	Equipment
AGRICULTURE, FORESTRY, AND FISHERIES:			
New capital expenditures (table 4) -----	7,298.4	1,532.0	5,766.4
MINING:			
New capital expenditures (table 4) -----	6,084.4	3,818.0	2,266.4
Net redefinitions and adjustments -----	<u>-494.6</u>	<u>-2.3</u>	<u>-492.3</u>
New capital expenditures, including redefinitions and adjustments -----	5,589.8	3,815.7	1,774.1
CONSTRUCTION:			
New capital expenditures (table 4) -----	3,674.5	596.0	3,078.5
Redefinitions and adjustments -----	<u>3,041.4</u>	<u>-3.5</u>	<u>3,044.9</u>
New capital expenditures, including redefinitions and adjustments -----	6,715.9	592.5	6,123.4
MANUFACTURING:			
New capital expenditures (table 4) -----	26,988.9	5,978.6	21,010.3
Net redefinitions and adjustments -----	<u>109.6</u>	<u>7.0</u>	<u>102.6</u>
New capital expenditures, including redefinitions and adjustments -----	27,098.5	5,985.6	21,112.9
TRANSPORTATION:			
New capital expenditures (table 4) -----	7,458.4	1,089.0	6,369.4
Redefinitions and adjustments -----	<u>-608.3</u>	<u>-5.6</u>	<u>-602.7</u>
New capital expenditures, including redefinitions and adjustments -----	6,850.1	1,083.4	5,766.7

Table 5.--New Capital Expenditures by Industry Division
Including Redefinitions and Adjustments, 1972
(Millions of dollars--purchasers' value)
- continued -

Industry number and title	Total	Structures	Equipment
COMMUNICATIONS:			
New capital expenditures (table 4) -----	10,601.0	3,439.0	7,162.0
Redefinitions and adjustments -----	-519.8	-----	-519.8
New capital expenditures, including redefinitions and adjustments -----	10,081.2	3,439.0	6,642.2
ELECTRIC, GAS, AND SANITARY SERVICES:			
New capital expenditures (table 4) -----	15,580.4	8,922.0	6,658.4
Redefinitions and adjustments -----	-1,381.0	12.5	-1,393.5
New capital expenditures, including redefinitions and adjustments -----	14,199.4	8,934.5	5,264.9
WHOLESALE AND RETAIL TRADE:			
New capital expenditures (table 4) -----	11,538.6	3,733.0	7,805.6
Redefinitions and adjustments -----	-972.8	-391.0	-581.8
New capital expenditures, including redefinitions and adjustments -----	10,565.8	3,342.0	7,223.8
FINANCE, INSURANCE, AND REAL ESTATE:			
New capital expenditures (table 4) -----	74,328.9	68,339.5	5,989.4
Redefinitions and adjustments -----	-1.0	-.2	-.8
New capital expenditures, including redefinitions and adjustments -----	74,327.9	68,339.3	5,988.6
SERVICES:			
New capital expenditures (table 4) -----	18,911.8	9,385.0	9,526.8
Redefinitions and adjustments -----	826.5	383.1	443.4
New capital expenditures, including redefinitions and adjustments -----	19,738.3	9,768.1	9,970.2
Total -----	182,465.3	106,832.1	75,633.2

expenditures to be redefined were made by using the ratio of new capital expenditures for structures and equipment to current output in the principal producing industry applied to the amount of output redefined in 1972.

Revisions of the capital expenditure estimates for industries were made to reflect the following types of industry redefinitions and adjustments, changes being made from:

Mining to:

Construction:	Force account construction Installation work
Utilities:	Sale of surplus electric power
Trade:	Gross margins on sales of merchandise

Construction to:

Services:	Installation of machinery and equipment Snow removal Demolition work
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Manufacturing to:

Construction:	Force account construction
Manufacturing:	Alumina production redefined from the chemical industry to primary nonferrous metals Dressed and dyed furs from miscellaneous manufacturing to the apparel industry
Utilities:	Sales of surplus electric power
Trade:	Gross margins on resales of merchandise

Transportation to:

Construction:	Force account construction
Manufacturing:	Building and rebuilding of locomotives and railroad cars in railroad shops
Utilities:	Sales of surplus electric power by railroads
Trade:	Gross margins on the sales of merchandise
Services:	Receipts from sales of food and beverages

Communications to:

Construction:	Force account construction
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Electric, gas, and sanitary services to:

Construction:	Force account construction
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Wholesale and retail trade to:

Construction:	Force account construction
Manufacturing:	Receipts from manufacturing activities in wholesale and retail trade establishments
Services:	Receipts from services rendered in wholesale and retail trade establishments

Finance, insurance, and real estate to:

Construction: Force account construction

Services to:

Construction: Force account construction

Trade: Gross margins on sales of merchandise in
service establishments

Services: Receipts for providing secondary services
are redefined to the primary producer of
the service

C. *Reconciliation of estimates of capital
flows and capital expenditures*

The preceding sections have described two sets of estimates of the acquisition of capital goods by industry. In the first set, totals for each using industry were derived by distributing the individual capital goods to using industries and then summing by using industry. In the second set, capital expenditures by each industry were derived more directly by estimating total expenditures for new structures and for new equipment. A comparison of the two sets of estimates is shown for structures in table 6A and for equipment in table 6B. The structures total for the capital flow estimates include mobile structures (I-0 61.0602) and dealers' commissions on new structures (I-0 71.0200), in addition to allocations of new construction (I-0 11.0101-11.0508). As noted in table 4, the expenditure estimates for structures exceed the flow estimates by an unexplained difference of \$3,045.3 million, while the flow estimates for equipment exceed the expenditure estimates by \$6,403.4 million. The expenditure estimates, the flow estimates, and the differences between them are shown by industry in columns 1 to 3 of table 6A and 6B. In all, the flow estimates of gross private domestic new fixed investment in structures and equipment exceeded the expenditure estimates by \$3,358.1 million.

As stated at the outset, the objective of this study on transactions in new structures and equipment has been to trace the flow of new capital goods to the capital using industries. There are flaws in the estimates of both capital flows and capital expenditures so it was desirable to consider both in arriving at a final set of estimates. The procedure was to modify the initial flow estimates by industry to take account of the information on capital expenditures.

Final estimates for structures.--The final estimates of capital flows for structures were achieved by a series of explicit changes to the initial capital flow estimates; these changes are shown in column 4 of table 6. The estimates of expenditures were used as guides for most industries even though the all-industry total of expenditures for structures exceeded the control total obtained in the I-0 study by \$3.9 billion. The expenditure estimates for structures needed to be reduced accordingly by this amount. The procedures in the individual industry division will now be briefly described.

1. In agriculture, the capital expenditure estimates were accepted as controls.

Table 6.--Comparison of Capital Expenditures After Redefinitions and Adjustments
and the Sum of Capital Flow Estimates by Using Industries: 1972
(Millions of dollars--purchasers' value)

Part A: Structures

Using industry	Capital expendi- tures*	Initial estimates of capi- tal flows	Difference (2) - (1)	Adjustment to capital flows (5) - (2)	Final estimates of capi- tal flows
	(1)	(2)	(3)	(4)	(5)
TOTAL -----	106,832.1	103,786.8	-3,045.3	----	103,786.8
Agriculture, forestry & fisheries -----	1,532.0	1,491.9	-40.1	40.2	1,532.1
01 -----	608.0	900.4	292.4	-292.3	608.1
02 -----	824.0	591.5	-232.5	232.5	824.0
03 -----	100.0	----	-100.0	47.0	47.0
04 -----				53.0	53.0
Mining -----	3,815.7	3,277.5	-538.2	276.1	3,553.6
05 -----	97.2	66.0	-31.2	31.2	97.2
06 -----	202.8	186.2	-16.6	16.6	202.8
07 -----	216.6	142.6	-74.0	74.0	216.6
08 -----	3,164.3	2,760.3	-404.0	142.0	2,902.3
09 -----	111.9	99.6	-12.3	12.3	111.9
10 -----	22.9	22.8	-0.1	----	22.8
Construction (11,12) -	592.5	384.9	-207.6	----	384.9
Manufacturing -----	5,985.6	5,314.4	-671.2	669.3	5,983.7
13 -----	40.3	43.6	3.3	-3.3	40.3
14 -----	692.7	585.8	-106.9	106.9	692.7
15 -----	64.0	46.1	-17.9	17.9	64.0
16 -----	142.1	109.8	-32.3	32.3	142.1
17 -----	43.7	39.1	-4.6	4.6	43.7
18 -----	155.4	157.2	1.8	-1.8	155.4
19 -----	21.8	25.5	3.7	-3.7	21.8
20 -----	202.9	179.0	-23.9	23.9	202.9
21 -----	2.7	5.2	2.5	-2.5	2.7
22 -----	80.0	76.5	-3.5	3.5	80.0
23 -----	39.3	37.3	-2.0	2.0	39.3
24 -----	177.3	149.5	-27.8	27.8	177.3
25 -----	42.2	41.4	-0.8	0.8	42.2
26 -----	266.5	317.3	50.8	-50.8	266.5
27 -----	283.4	217.2	-66.2	66.2	283.4
28 -----	121.9	84.4	-37.5	37.5	121.9

Table 6.--Comparison of Capital Expenditures After Redefinitions and Adjustments
and the Sum of Capital Flow Estimates by Using Industries: 1972
(Millions of dollars--purchasers' value)

- continued -

Part A: Structures

Using industry	Capital expendi- tures*	Initial estimates of capi- tal flows	Difference (2) - (1)	Adjustment to capital flows (5) - (2)	Final estimates of capi- tal flows
	(1)	(2)	(3)	(4)	(5)
29 -----	159.5	137.9	-21.6	21.6	159.5
30 -----	28.2	27.0	-1.2	1.2	28.2
31 -----	654.2	526.2	-128.0	127.9	654.1
32 -----	243.2	228.9	-14.3	14.3	243.2
33 -----	4.3	3.8	-0.5	----	3.8
34 -----	16.7	19.5	2.8	-2.8	16.7
35 -----	63.6	53.6	-10.0	10.0	63.6
36 -----	176.6	160.3	-16.3	16.3	176.6
37 -----	274.8	232.0	-42.8	42.8	274.8
38 -----	176.7	149.1	-27.6	27.6	176.7
39 -----	15.2	14.3	-0.9	----	14.3
40 -----	118.4	117.7	-0.7	----	117.7
41 -----	45.9	52.5	6.6	-6.6	45.9
42 -----	96.5	98.6	2.1	-2.1	96.5
43 -----	48.7	40.1	-8.6	8.6	48.7
44 -----	46.0	39.2	-6.8	7.3	46.5
45 -----	47.0	42.7	-4.3	4.3	47.0
46 -----	19.1	17.8	-1.3	1.3	19.1
47 -----	50.7	49.6	-1.1	1.1	50.7
48 -----	46.8	44.6	-2.2	2.2	46.8
49 -----	53.0	51.8	-1.2	1.2	53.0
50 -----	34.3	34.1	-0.2	----	34.1
51 -----	78.6	72.0	-6.6	6.6	78.6
52 -----	52.3	48.5	-3.8	3.8	52.3
53 -----	72.3	65.2	-7.1	7.1	72.3
54 -----	42.0	33.6	-8.4	8.4	42.0
55 -----	49.1	41.2	-7.9	7.9	49.1
56 -----	118.9	108.7	-10.2	10.2	118.9
57 -----	74.0	62.5	-11.5	11.5	74.0
58 -----	25.2	22.0	-3.2	3.2	25.2
59 -----	230.8	164.0	-66.8	66.8	230.8
60 -----	38.0	74.2	36.2	-36.2	38.0
61 -----	167.9	142.1	-25.8	25.8	167.9
62 -----	75.8	72.0	-3.8	3.8	75.8
63 -----	63.4	47.5	-15.9	15.9	63.4
64 -----	101.7	104.7	3.0	-3.0	101.7
Transportation and utilities -----	13,456.9	13,286.0	-170.9	----	13,286.0
65 -----	1,083.4	1,324.3	240.9	----	1,324.3

Table 6.--Comparison of Capital Expenditures After Redefinitions and Adjustments
and the Sum of Capital Flow Estimates by Using Industries: 1972
(Millions of dollars--purchasers' value)
- continued -

Part A: Structures

Using industry	Capital expendi- tures*	Initial estimates of capi- tal flows	Difference (2) - (1)	Adjustment to capital flows (5) - (2)	Final estimates of capi- tal flows
	(1)	(2)	(3)	(4)	(5)
66 -----	3,307.0	3,279.9	-27.1	----	3,279.9
67 -----	132.0	48.3	-83.7	----	48.3
68 -----	8,934.5	8,633.5	-301.0	----	8,633.5
Wholesale & retail trade (69) -----	3,342.0	6,016.9	2,674.9	-686.2	5,330.7
Finance, insurance & real estate ---	68,339.3	62,143.3	-6,196.0	-295.1	61,848.2
70 -----	3,088.7	529.1	-2,559.6	----	529.1
71 -----	65,250.6	61,614.2	-3,636.4	-295.1	61,319.1
Services -----	9,768.1	11,871.9	2,103.8	-4.3	11,867.6
72 -----	1,507.9	3,700.2	2,192.3	----	3,700.2
73 -----	561.8	481.6	-80.2	----	481.6
74 -----	697.9	745.7	47.8	----	745.7
75 -----	330.7	748.4	417.7	-4.3	744.1
76 -----	507.1	828.5	321.4	-305.0	523.5
77 -----	6,162.7	5,367.5	-795.2	305.0	5,672.5

* This column of capital expenditures equals the estimates of capital expenditures after redefinitions and adjustments in table 5.

Table 6.--Comparison of Capital Expenditures After Redefinitions and Adjustments
and the Sum of Capital Flow Estimates by Using Industries: 1972
(Millions of dollars--purchasers' value)

Part B: Equipment

Using industry	Capital expenditures*	Initial estimates of capital flows	Difference (2) - (1)	Adjustment to capital flows (5) - (2)	Final estimates of capital flows
	(1)	(2)	(3)	(4)	(5)
TOTAL -----	75,633.2	82,036.6	6,403.4	----	82,036.6
Agriculture, forestry & fisheries -----	5,766.4	5,986.1	219.7	-191.2	5,794.9
01 -----	644.2	764.4	120.2	123.5	887.9
02 -----	4,551.3	4,651.6	100.3	-314.7	4,336.9
03 -----	} 570.9	134.7	} -0.8	----	134.7
04 -----		435.4			435.4
Mining -----	1,774.1	1,701.7	-72.4	72.2	1,773.9
05 -----	39.3	63.3	24.0	-23.6	39.7
06 -----	169.5	172.2	2.7	-2.7	169.5
07 -----	523.8	466.0	-57.8	56.4	522.4
08 -----	688.2	568.5	-119.7	119.8	688.3
09 -----	282.1	344.8	62.7	-62.5	282.3
10 -----	71.2	86.9	15.7	-15.2	71.7
Construction (11,12) -	6,123.4	6,167.1	43.7	-14.6	6,152.5
Manufacturing -----	21,112.9	21,611.8	498.9	124.3	21,736.1
13 -----	98.8	127.2	28.4	-23.0	104.2
14 -----	2,057.1	2,176.3	119.2	-16.5	2,159.8
15 -----	107.4	113.9	6.5	-3.6	110.3
16 -----	557.5	735.0	177.5	-169.9	565.1
17 -----	128.9	154.2	25.3	-22.9	131.3
18 -----	591.4	612.7	21.3	18.0	630.7
19 -----	78.6	71.9	-6.7	9.7	81.6
20 -----	720.2	959.8	239.6	-200.1	759.7
21 -----	9.0	12.3	3.3	-2.1	10.2
22 -----	146.6	197.4	50.8	-40.8	156.6
23 -----	74.4	90.1	15.7	-10.3	79.8
24 -----	1,026.3	872.5	-153.8	177.3	1,049.8
25 -----	178.7	109.4	-69.3	72.7	182.1
26 -----	908.3	1,033.2	124.9	-51.8	981.4
27 -----	1,362.4	1,530.4	168.0	-165.0	1,365.4
28 -----	670.9	370.8	-300.1	306.9	677.7

Table 6.--Comparison of Capital Expenditures After Redefinitions and Adjustments
and the Sum of Capital Flow Estimates by Using Industries: 1972
(Millions of dollars--purchasers' value)
- continued -

Part B: Equipment

Using industry	Capital expendi- tures*	Initial estimates of capi- tal flows	Difference (2) - (1)	Adjustment to capital flows (5) - (2)	Final estimates of capi- tal flows
	(1)	(2)	(3)	(4)	(5)
29 -----	403.4	390.1	-13.3	23.0	413.1
30 -----	64.5	76.2	11.7	-8.6	67.6
31 -----	626.4	545.6	-80.8	79.7	625.3
32 -----	836.5	726.5	-110.0	117.6	844.1
33 -----	14.6	26.3	11.7	-11.9	14.4
34 -----	55.8	52.1	-3.7	4.4	56.5
35 -----	267.1	148.5	-118.6	126.4	274.9
36 -----	779.3	733.3	-46.0	69.1	802.4
37 -----	1,212.3	1,141.8	-70.5	75.5	1,217.3
38 -----	674.8	608.2	-66.6	69.2	677.4
39 -----	141.5	66.4	-75.1	79.8	146.2
40 -----	286.1	455.3	169.2	-154.1	301.2
41 -----	275.9	311.1	35.2	-19.7	291.4
42 -----	363.3	457.8	94.5	-73.9	383.9
43 -----	157.6	77.6	-80.0	79.5	157.1
44 -----	141.1	114.6	-26.5	34.7	149.3
45 -----	209.4	174.6	-34.8	42.7	217.3
46 -----	45.6	56.5	10.9	-6.4	50.1
47 -----	206.8	299.0	92.2	-81.1	217.9
48 -----	136.2	169.5	33.3	-22.3	147.2
49 -----	213.9	219.2	5.3	7.4	226.6
50 -----	142.9	153.6	10.7	-1.8	151.8
51 -----	249.0	238.0	-11.0	26.3	264.3
52 -----	203.9	168.8	-35.1	54.6	223.4
53 -----	243.6	337.8	94.2	-70.1	267.7
54 -----	140.5	155.8	15.3	-2.1	153.7
55 -----	152.7	285.6	132.9	-117.9	167.7
56 -----	443.7	564.4	120.7	-79.0	485.4
57 -----	343.8	392.9	49.1	-16.7	376.2
58 -----	90.3	116.0	25.7	-16.1	99.9
59 -----	2,110.9	1,707.2	-403.7	243.9	1,951.1
60 -----	211.8	421.6	209.8	-174.3	247.3
61 -----	247.0	255.6	8.6	-3.6	252.0
62 -----	193.1	263.4	70.3	-51.1	212.3
63 -----	241.6	195.6	-46.0	68.8	264.4
64 -----	269.5	338.2	68.7	-46.2	292.0
Transportation and utilities -----	17,673.8	19,401.0	1,727.2	181.2	19,582.2
65 -----	5,766.7	8,842.1	3,075.4	-198.8	8,643.3

Table 6.--Comparison of Capital Expenditures After Redefinitions and Adjustments
and the Sum of Capital Flow Estimates by Using Industries: 1972
(Millions of dollars--purchasers' value)

- continued -

Part B: Equipment

Using industry	Capital expendi- tures*	Initial estimates of capi- tal flows	Difference (2) - (1)	Adjustment to capital flows (5) - (2)	Final estimates of capi- tal flows
	(1)	(2)	(3)	(4)	(5)
66 -----	6,481.1	5,590.3	-890.8	299.9	5,890.2
67 -----	161.1	613.2	452.1	-299.3	313.9
68 -----	5,264.9	4,355.4	-909.5	379.4	4,734.8
Wholesale & retail trade (69) -----	7,223.8	8,769.8	1,546.0	-308.7	8,461.1
Finance, insurance & real estate -----	5,988.6	6,038.6	50.0	-266.2	5,772.4
70 -----	2,762.9	2,547.7	-215.2	-6.7	2,541.0
71 -----	3,225.7	3,490.9	265.2	-259.6	3,231.4
Services -----	9,970.2	12,360.5	2,390.3	403.0	12,763.5
72 -----	1,264.7	2,351.3	1,086.6	36.4	2,387.7
73 -----	2,904.1	2,936.2	32.1	0.2	2,936.4
74 -----	737.2	1,216.6	479.4	8.1	1,224.6
75 -----	2,373.5	1,062.9	-1,310.6	474.5	1,537.4
76 -----	394.8	1,131.6	736.8	-121.7	1,009.9
77 -----	2,295.9	3,661.9	1,366.0	5.6	3,667.5

*This column of capital expenditures equals the estimates of capital expenditures after redefinitions and adjustments in table 5.

2. In mining, the capital expenditure estimates were accepted in five of the six industries. The expenditure estimates were accepted in five of the six industries. The expenditure estimate for crude petroleum and natural gas mining (I-O 8), by far the largest mining industry, was too small to be accommodated to the I-O study's construction flow estimate for new petroleum and gas well drilling and exploration and development, and a higher figure was used.
3. In construction, the capital flow estimate was accepted because the larger expenditure estimate may have included increases in inventories of structures held by speculative builders.
4. In manufacturing, the expenditure estimates were generally accepted as controls and the capital flow estimates were adjusted accordingly.
5. In transportation and utilities, the capital flow estimates were accepted, because the construction-put-in-place estimates used in the flow analysis were specified by types of construction used by these industries.
6. In wholesale and retail trade, the final estimate fell between the two initial estimates, but it was closer to the flow estimate, which reflected a use rather than an ownership basis.
7. In finance, insurance, and real estate, the flow estimates were generally accepted, because they reflected allocations on a use rather than an ownership basis.
8. In services, the estimates tended to follow the flow estimates, which were somewhat higher than the expenditure estimates, because expenditure data were thought likely to be understated and to reflect an ownership rather than a use basis.

Final estimates for equipment.--The flow estimates for equipment were \$6.3 billion larger than the expenditure estimates. In percentage terms, the discrepancy was 2.8 times as large as that for structures. Because in the aggregate, the flow estimate for equipment was controlling, the expenditure estimates could be used only as a broad indicator of the acquisition of equipment by industry. The initial flow estimates were modified in two steps.

First, explicit modifications were made to the larger estimates if they differed sharply from the expenditure estimates and investigation revealed weak methodology or errors in the initial allocations of flows or uncovered additional relevant information. Second, the initial flow estimates were modified by a series of "rocking" (bi-proportional) adjustments to conform them to the commodity (row) totals and a revised set of industry (column) totals, which were adjusted to agree in total with the total equipment figure. The justification for the "rocking" procedure was that the initial flow estimates, to the extent that they depended on some general measure of the use of the product in the industry, did not necessarily reflect investment for replacement and expansion in that industry. On the other hand, the estimates of capital expenditures by industry, while not tied to controls for structures and for equipment in the NIPA's, do indicate the level of capital investment, though not its product content. The "rocking" procedure tends to preserve the pattern of capital inputs to the using industry while aligning them with a better estimate of the industry's total investment.

The main explicit modifications will be described first. The initial equipment flow estimates for agriculture were adjusted to accommodate the expenditure estimates, which had been based on information in the NIPA's. The flow estimates were also adjusted to agree with the estimates of residential landlords' durable equipment in the preliminary NIPA benchmark. The allocation of special industry machines was adjusted by use of information on capital expenditures for equipment by using industries. Investment in rental cars and trucks (as opposed to leased equipment) in the automotive services industry (I-0 75) was specifically included. (Leased equipment was already treated on a use basis in the capital flow analysis.)

To introduce the remaining adjustments, control totals were established by industry for the acquisition of capital equipment. The procedure generally accepted the expenditure figure when it was above the flow figure. This was the case in mining and manufacturing industries. Before the capital expenditure estimates in the manufacturing industries were used, they were increased to allow for rented machinery and equipment. This adjustment was based on the relationship between the gross book value of depreciable assets and rental payments for machinery and equipment in 1972. 7/

The estimates of capital flows and capital expenditures for equipment were not far apart in the agriculture, mining, construction, and manufacturing divisions. The total difference amounted to only \$690.0 million, so required adjustments to the expenditure control estimates were relatively small. Of the overall difference of \$6.3 billion in the estimates, the major portion, \$5.6 billion, was absorbed by the remaining industries. In establishing expenditure controls for these industries, two factors were considered. First, the capital expenditure figures for these industries were developed from diverse sources and were weaker in quality and coverage than the estimates for other industries. Second, the estimates had to be compatible with the overall capital flow total for capital equipment. Therefore, the revised expenditure controls established for the nonmanufacturing industries were, in general, based on the initial capital flow estimates after modification by earlier specific adjustments.

At this stage, the "rocking" procedure was introduced to bring the matrix into balance. In applying the "rocking" procedure, estimates in certain cells (e.g., cells estimated by procedures classed 1 or 2 in table 3) were fixed and exempted from the "rocking" procedure. Similarly, certain columns (I-0 1, 2, 3, 4, and 71) were also exempted from the procedure in order to leave the original estimates undisturbed. The nonexempted portion of the matrix was then "rocked" using appropriately adjusted row and column controls. Limits were placed on the absolute and relative change any estimate could undergo without being flagged for more detailed investigation. The fully reconciled CFT for equipment in purchasers' prices was attained by adding the matrix resulting from the "rocking" operations to the matrix of exempted cells.

7/ The value of rented machinery and equipment was estimated at five times the annual rental payment. Data are from Bureau of the Census, *Annual Survey of Manufactures, 1972*, Expenditures for New Plant and Equipment and Book Value of Fixed Assets and Rental Payments for Buildings and Equipment.

D. *Estimation of margins and the producers' value CFT*

The initial estimates and reconciliation adjustments described in the previous sections were made in purchasers' values. Producers' values and the intervening transportation costs and trade margins still needed to be estimated for each product/industry cell. Products in the GPDFI control column can have as many as six such margin items. The individual margin rate associated with each product, as calculated from the over-all allocation of the product to GPDFI, was applied to all the allocations (row-wise) of that product. The transportation costs and trade margins estimated for a cell were subtracted from that cell's purchasers' value to yield its producers' value. Then each type of transportation or trade margin cost was summed by industry and recorded as one sale of that type of freight or margin service to that industry. The allocations from the transportation and trade margin industries show producers' value but have zero purchasers' value, thus maintaining the table's balance in each price system.

Appendix A
Initial Capital Flow Estimates of New Structures
and Equipment, by Using Industries, 1972

This appendix lists the 606 capital goods items that comprise gross private new fixed domestic investment in the CFT for 1972 and describes briefly the procedures used to make initial estimates of the flows of new capital goods to using industries in 1972. The following information is shown for each commodity:

1. The I-0 commodity code is shown in six-digit detail in the first column.
2. The capital goods code, in the second column, used in the current account I-0 personal consumption expenditure/producers' durable equipment (PCE/PDE) file, permits the reconciliation of the commodity detail with the detail published in the NIPA's for structures by type and for producers' durable equipment (PDE) by category. 1/ In some instances, a commodity is split between two or more PDE codes. The splits occur mainly for products that make up landlord durable equipment. The commodities involved are indicated by a 999 capital goods code; table 7 shows the applicable codes and the amounts allocated to each. A reconciliation with existing published data for 1972 is shown in table 6 of the main text.
3. The product code, in the third column, is related to the Standard Industrial Classification and is based on the item codes used in compiling the PCE/PDE file from the current account I-0 table. In a few instances, some of the PDE codes were combined and a new code was assigned before allocating to using industries in this study. In the appendix A listings, a '+' is placed in front of combined codes to inform the reader that the adjacent code is not identical to the code in the PDE file.
4. The import identifying code shows 0 for domestically produced commodities and 1 for comparable imported commodities. 2/
5. All values are shown in millions of dollars to one decimal place. The total producers' value for all commodities in the group is shown at the bottom of the column. The total producers' value for each two-digit I-0 commodity group agrees with the detail in column 92 of Table 1, "The Use of Commodities by Industries: 1972," in the April 1979 *Survey* except for scrap and used capital goods and commissions on sale of existing structures.
6. The purchasers' value of each commodity includes transportation costs and trade margins. The total purchasers' value of the I-0 commodity group is shown at the bottom of the column.

The transportation costs and trade margins for all the commodities in a group are summarized at the bottom of the list. The sum of these equals the difference between total producers' and purchasers' values.

A summary description of the initial procedures for distributing commodities to using industries follows the list for each two-digit I-0 commodity group.

1/ A computer tape of the item detail in the PCE/PDE file can be purchased from BEA's Interindustry Economics Division (BE-51) for \$200.00. The accession number is BEA IED 79-010.

2/ The product codes for all comparable imports in the PDE file begin with an 8 in that seven character field, whereas the product code for the comparable domestically produced good was assigned for the CFT.

Table 7.--I-0 Products Relating to Multiple Capital Goods Codes
(Millions of dollars)

A.--Product codes involving landlord durable equipment (capital goods code 4000)				
Product code	Amount in purchasers' value			Other capital goods codes
	Total	Allocated to		
		Landlord durable equipment (4000)	Other capital goods categories	
2270	695.1	411.5	283.6	3090
229103	10.0	5.9	4.1	3090
25110010	20.2	4.7	15.5	3010
25110011	17.7	2.8	14.9	3010
25112	71.1	11.4	59.7	3010
25113	69.8	11.3	58.5	3010
25115	119.2	19.2	100.0	3010
2512	225.1	36.9	188.2	3010
25141	29.0	4.8	24.2	3010
251422	3.5	0.6	2.9	3010
251441	15.8	1.1	14.7	3010
2515001	8.8	2.2	6.6	3010
2515115	36.8	6.4	30.4	3010
25152	8.6	1.4	7.2	3010
251531	31.6	5.1	26.5	3010
25157	30.3	5.0	25.3	3010
3069351	13.9	0.8	13.1	3090
3069317	23.3	1.4	21.9	3090
3079241	13.2	0.8	12.4	3090
363120	94.6	88.9	5.7	3063
36321000	467.7	439.7	28.0	3063
363412	2.9	0.6	2.3	3063
363414	3.3	0.3	3.0	3063
3634310	27.5	6.0	21.5	3063
3634340	2.4	0.5	1.9	3060
36512	73.8	36.9	36.9	3062
36512001	14.8	7.4	7.4	3062

Table 7.--I-0 Products Relating to Multiple Capital Goods Codes
(Millions of dollars)
- continued -

B.--Other split product codes; purchasers' value		
Product code	Capital goods code	Amount
35230010	999	3,654.1
	3040	<u>1,247.8</u>
	3051	2,306.6
	3090	99.7
35230011	999	237.1
	3040	<u>54.8</u>
	3051	182.3
3531	999	-104.3
	3040	<u>-20.2</u>
	3052	-84.1
3559099	999	78.7
	3020	<u>5.0</u>
	3055	73.7
6509	999	697.9
	1511	<u>10.9</u>
	2211	687.0

Before describing the procedures for allocating individual product codes across using industries, procedures used generally are discussed, thus avoiding repetitions.

1. Some products are identified as "n.s.k." (not specified by kind). This is a catchall classification for a commodity group for which detailed commodity information was not reported by some--usually small--establishments. Except where noted, these n.s.k. products were distributed to using industries in proportion to the aggregated distributions of related products with the same first four digits in the product code.
2. Some products are described as "undistributed." These product codes gather the undistributed residuals from detailed products in the 1972 I-0 study. These residuals were lumped and treated as a single product code during the final reconciliation of the I-0 table. The "undistributed" product codes in this study have been allocated to using industries in the same way as the n.s.k. codes were allocated, i.e., in proportion to the aggregated allocations of related products with the same first four digits in the product code.

3. The n.s.k. and "undistributed" products frequently show negative values. This situation arises because during the final reconciliation of the I-0 table, negative as well as positive adjustments to estimates of sales and use of products were entered. Negative and positive amounts were both distributed in proportion to the aggregated allocations of related products.
4. Imported products were usually distributed in proportion to the distribution of the comparable domestic product.

In the absence of specific information regarding the use of individual capital goods by industry, it was frequently necessary to resort to some proxy in order to distribute a product. A frequently used proxy was the number of employees in industries in occupations related to the equipment being distributed. The statistics used for these prorations were derived from information on occupation by industry in the *1970 Census of Population*, which provides detail for 422 occupations in 426 industries. ^{3/} These data were updated to 1972 by increasing employment by occupation in each industry by the relative increase in total employment in the industry between 1970 and 1972.

The updated employment matrix was further adjusted to account for redefinitions of commodities in the 1972 I-0 table from one to another producing industry. For example, force account construction was included in the appropriate construction industry; manufacturing operations in trade establishments were redefined to the appropriate manufacturing industry; etc. ^{4/}

In the process of redefining employment by occupation from one industry to another, the receiving industry's employment pattern was used and the number of employees equaled the employee compensation for the redefined activity divided by the receiving industry's rate of compensation. The computer program for this redefinition provided limits to avoid exaggerated removal of employees from a single occupation. The resulting employment matrix was then aggregated to 422 occupations and the 76 industry classification used in this study. Up to 20 occupation codes could be specified for a receiving industry, when employment by occupation was used for distribution.

^{3/} Bureau of the Census, *1970 Census of Population*, Subject Report, Occupation by Industry.

^{4/} Redefinitions are discussed in the article in the February 1979 *Survey* and in section II-B of the present report.

Commodity 6 - Nonferrous metal ores mining\$211.5 millionCodes

I-O	CAP GOOD	PRODUCT	I M P	PRODUCER VALUE	PURCHASER VALUE	PRODUCT DESCRIPTIONS
060200	3020	1094201	0	198.6	211.5	URANIUM CONCENTRATES
TOTALS				198.6	211.5	
MARGINS:						
TRANSPORT				8.1		
TRADE				4.8		
MARGIN TOTAL				12.9		

Distribution

Uranium concentrates (1094201) are used for fabrication into fuel rods for nuclear power plants and are recorded as depreciable assets by private power companies. They were allocated accordingly to the utilities industry (I-0 68) as the sole user.

Commodity 8 - Crude petroleum and natural gas\$53.4 millionCodes

I-O	CAP GOOD	PRODUCT	I M P	PRODUCER VALUE	PURCHASER VALUE	PRODUCT DESCRIPTIONS
080000	3053	13892	0	53.4	53.4	MACHINERY INSTALLATION
TOTALS				53.4	53.4	

Distribution

Charges for installing machinery for the production of crude petroleum and natural gas (13892) were allocated to I-0 industry 8 as the sole user.

Codes						
I-O	CAP GOOD	PRODUCT	I M P	PRODUCER VALUE	PURCHASER VALUE	PRODUCT DESCRIPTIONS
110101	2010	1503	0	29212.0	29212.0	RESIDENTIAL SINGLE FAMILY HOUSING, NONFARM
110102	2021	1504	0	2438.0	2438.0	RESIDENTIAL TWO-FOUR FAMILY HOUSING
110103	2022	1505	0	11694.0	11694.0	RESIDENTIAL GARDEN APARTMENTS
110104	2023	1506	0	3884.0	3884.0	RESIDENTIAL HIGH-RISE APARTMENTS
110105	2040	1507	0	7329.0	7329.0	RESIDENTIAL ALTERATIONS AND ADDITIONS
110106	2061	1508	0	1882.0	1882.0	HOTELS AND MOTELS
110107	2062	1509	0	107.0	107.0	DORMITORIES
110201	1010	1511	0	4676.0	4676.0	INDUSTRIAL BUILDINGS
110202	1021	1512	0	5269.0	5269.0	OFFICE BUILDINGS
110203	1022	1513	0	1803.0	1803.0	WAREHOUSES
110204	1023	1514	0	656.0	656.0	GARAGES AND SERVICE STATIONS
110205	1024	1515	0	5736.0	5736.0	STORES AND RESTAURANTS
110206	1030	1516	0	844.0	844.0	RELIGIOUS BUILDINGS
110207	1040	1517	0	968.0	968.0	EDUCATIONAL BUILDINGS
110208	1050	1518	0	3172.0	3172.0	HOSPITAL BUILDINGS
110209	1060	1519	0	914.0	914.0	OTHER NONFARM BUILDINGS
110301	1120	1601	0	3235.0	3235.0	TELEPHONE AND TELEGRAPH FACILITIES
110302	1110	1602	0	359.0	359.0	RAILROADS
110303	1130	1603	0	6992.0	6992.0	ELECTRIC UTILITY FACILITIES
110304	1140	1604	0	1615.0	1615.0	GAS UTILITY FACILITIES
110305	1150	1605	0	284.0	284.0	PETROLEUM PIPELINES
110501	2121	1621	0	576.0	576.0	FARM RESIDENTIAL BUILDINGS
110502	1210	1622	0	1432.0	1432.0	FARM SERVICE FACILITIES
110503	1321	1623	0	2340.1	2340.1	OIL AND GAS WELLS
110504	1322	1624	0	372.7	372.7	OIL AND GAS EXPLORATION
110504	1323	1624	0	27.2	27.2	OTHER MINERAL EXPLORATION, SHAFTS & WELLS
110507	1410	1627	0	941.0	941.0	OTHER NONBUILDING FACILITIES
110508	1323	1628	0	355.7	355.7	SOLID MINERAL EXPLORATION AND DEVELOPMENT
TOTALS				99086.5	99086.5	

Distribution

Residential buildings.--Housekeeping residential buildings (1503-7 and 1621) were allocated to the real estate and rental industry (I-0 71) in conformity with the national income and product accounts (NIPA's), which count both rental and owner-occupied housing as business investment.

Hotels and motels (1508) were allocated to hotels and lodging, personal and repair services, except auto (I-0 72) as the sole user. Dormitories (1509) were allocated to health, educational, and social services and nonprofit organizations (I-0 77) as the sole user.

Nonresidential buildings.--Industrial buildings (1511) were prorated to the mining, manufacturing, and drycleaning industries based on information on capital expenditures for new structures and additions to plant, as reported in the *1972 Census of Mineral Industries*, the *1972 Census of Manufactures* (Volume I), and the *1972 Census of Selected Service Industries* (Miscellaneous Subjects).

Office buildings (1512) - Twenty percent was allocated to the real estate and rental industry (I-0 71) to allow for the acquisition of office buildings leased to the general government sector. The estimate is arbitrary and is in rough conformity with measures of government acquisition of overall new construction, purchases of

goods and services, and civilian employment. The remaining 80 percent was allocated to industries on a use basis. The distribution was made according to the industries' employment of the following occupations: accountants, architects, lawyers, mathematicians, statisticians, economists, editors and reporters, bank officers and financial officers, office managers, managers and administrators, bookkeepers, messengers and office boys, and secretaries.

Warehouses (1513) - An arbitrary two percent was allocated to the construction industry (I-0 11) on the advice of the construction industry analyst. The allocation to wholesale and retail trade (I-0 69), amounting to 73 percent of the total, was based on information on capital expenditures for new buildings by merchant wholesalers and for new warehouses by central administrative offices in trade as reported in the *1972 Census of Wholesale Trade* (U.S. Summary) and in *1972 Enterprise Statistics* (Part 2). The residual was allocated to the public warehousing industry (I-0 65).

New garages and service stations (code 1514) - These were allocated to retail gasoline service stations (I-0 69) and automotive services (I-0 75). The split between I-0 69 and I-0 75 was based on capital expenditures for new facilities reported in the *1972 Census of Retail Trade* and the *1972 Census of Selected Service Industries*.

New stores and restaurants (1515) - These were distributed among trade (I-0 69), personal services (I-0 72), and eating and drinking places (I-0 74) according to capital expenditures for new structures, published in the *1972 Census of Retail Trade* and the *1972 Census of Selected Service Industries*.

New religious buildings, schools and hospitals (1516, 1517, 1518) - These were allocated to health, educational, and social services and nonprofit organizations (I-0 77).

Other new buildings (1519) - Likely users were identified by the description of buildings included in this category as described in *Value of New Construction Put in Place, 1947-1974*. An allocation was made to the amusements industry (I-0 76) based on capital expenditures for new facilities from the *1972 Census of Selected Service Industries*. The residual was distributed judgmentally to agricultural services (I-0 4), transportation (I-0 65), radio and TV broadcasting (I-0 67), and nonprofit organizations (part of I-0 77).

New construction, public utilities - Telephone and telegraph facilities (1601) were allocated to the communications industry (I-0 66). Railroad facilities and new petroleum pipelines (1602 and 1605) were allocated to the transportation industry (I-0 65). Electric utilities and gas utilities (1603 and 1604) were allocated to the utilities industry (I-0 68).

New construction, all other buildings - Farm service facilities (1622) were allocated to the agricultural industries (I-0 1 and 2). The split was based on data on depreciation of structures other than dwellings, provided by the U.S. Department of Agriculture.

Oil and gas well drilling and exploration (1623 and 1624) were allocated to the crude petroleum and natural gas mining industry (I-0 8). Other mineral exploration, shafts and wells, was allocated to the other mining industries based on 1972 capital expenditures.

Other nonbuilding structures (1627) - The types of structures included in this category were identified in the report, *Value of New Construction Put in Place, 1947-1974*. No proportions or amounts, however, were available. So, each type of structure was identified by its purchaser(s) and an arbitrary distribution was made among these purchasing industries.

Expenditures for solid mineral exploration and development (1628) were allocated to all the mining industries except crude petroleum and natural gas mining. The allocations were made by prorating over the 1972 capital expenditures for mineral exploration and development reported in the *1972 Census of Mineral Industries*.

Commodity 13 - Ordnance and accessories

\$80.1 million

<u>Codes</u>						
I-O	CAP GOOD	PRODUCT	I M P	PRODUCER VALUE	PURCHASER VALUE	PRODUCT DESCRIPTIONS
130100	3062	3761523	0	80.0	80.0	SERVICES ON SPACE VEHICLES, NONGOVERNMENT
130700	3062	3489099	0	.1	.1	MISC. RECEIPTS
TOTALS				80.1	80.1	

Distribution

Receipts for services on space vehicles, nongovernment (3761523) and miscellaneous receipts (3489099), are for services rendered to COMSAT, which is classified in the communications industry (I-0 66).

Commodity 17 - Miscellaneous textile goods
and floor coverings

\$705.1 million

<u>Codes</u>						
I-O	CAP GOOD	PRODUCT	I M P	PRODUCER VALUE	PURCHASER VALUE	PRODUCT DESCRIPTIONS
170100	999	2270	0	597.5	695.1	CARPETS AND RUGS, EXCEPT AUTO AND AIRCRAFT
170200	999	229103	0	8.2	10.0	FELT CARPET AND RUG CUSHIONS
TOTALS				605.7	705.1	
MARGINS:						
TRANSPORT				17.0		
TRADE				82.4		
MARGIN TOTAL				99.4		

Distribution

Allocations of carpets and rugs (2270) and felt carpet and rug cushions (229103) for residential use in rental units were made to I-0 71 in conformity with NIPA estimates of landlord durables. The nonresidential share of these products was first allocated to types of buildings using information from a study by *Newsweek* ("The New and Replacement Contract Carpeting Study," May 1973) forecasting the use of new and replacement carpeting for 1973. Each type of building could be associated with an

I-0 industry except for the "office" category. This category was further distributed among using I-0 industries on the basis of their employment of office managers and managers and administrators, n.e.c.

Commodity 20 - Lumber and wood products,
except containers

\$5.2 million

<u>Codes</u>						
I-0	CAP GOOD	PRODUCT	I M P	PRODUCER VALUE	PURCHASER VALUE	PRODUCT DESCRIPTIONS
200903	3090	2499564	0	4.8	5.2	TANKS AND VATS, WOODEN, EXCEPT COOPERED
TOTALS				4.8	5.2	
MARGINS:						
TRANSPORT				.1		
TRADE				.3		
MARGIN TOTAL				.4		

Distribution

Wooden tanks and vats (2499564) were split arbitrarily, with equal amounts allocated to the food products industry (I-0 14) and the chemical industry (I-0 27).

Commodity 22 - Household furniture

\$728.3 million

<u>Codes</u>						
I-0	CAP GOOD	PRODUCT	I M P	PRODUCER VALUE	PURCHASER VALUE	PRODUCT DESCRIPTIONS
220101	999	2511001	0	19.0	20.2	WOODEN HOUSEHOLD FURNITURE, NSK
220101	999	2511001	1	14.9	17.7	IMPORTED WOODEN HOUSEHOLD FURNITURE, NSK
220101	999	25112	0	66.6	71.1	WOOD LIVING ROOM, LIBRARY, AND HALL FURNITURE
220101	999	25113	0	65.5	69.8	WOOD DINING AND KITCHEN FURNITURE
220101	999	25115	0	111.6	119.2	WOOD BEDROOM FURNITURE
220101	3010	25116	0	4.1	4.4	WOOD INFANTS' AND CHILDREN'S FURNITURE
220101	3010	25118	0	3.1	3.2	OUTDOOR FURNITURE
220102	999	251900	0	1.0	1.1	OTHER HOUSEHOLD FURNITURE, NEC.
220102	999	251900	1	8.4	9.9	IMPORTED OTHER HOUSEHOLD FURNITURE, NEC.
220102	999	251902	0	2.4	2.6	REED AND RATTAN FURNITURE
220102	999	251905	0	9.8	10.8	OTHER HOUSEHOLD FURNITURE
220200	999	2512	0	212.5	225.1	UPHOLSTERED WOOD HOUSEHOLD FURNITURE
220300	3010	2514	0	-6	-7	UNDISTRIBUTED METAL HOUSEHOLD FURNITURE
220300	999	25141	0	25.8	29.0	METAL HOUSEHOLD DINING FURNITURE
220300	999	251422	0	3.2	3.5	METAL KITCHEN FURNITURE
220300	3010	25143	0	8.5	9.5	METAL PORCH, LAWN, AND OUTDOOR FURNITURE
220300	999	251441	0	14.1	15.8	OTHER METAL HOUSEHOLD FURNITURE
220400	999	2515001	0	8.4	8.8	MATTRESSES AND BEDSPRINGS, NSK
220400	999	2515115	0	34.8	36.8	INNERSPRING MATTRESSES
220400	999	25152	0	8.2	8.6	OTHER MATTRESSES
220400	999	251532	0	29.9	31.6	BEDSPRINGS EXCLUDING HOSPITAL
220400	999	25157	0	28.7	30.3	SOFAS AND COUCHES
TOTALS				679.9	728.3	
MARGINS:						
TRANSPORT				9.2		
TRADE				39.2		
MARGIN TOTAL				48.4		

Distribution

PDE allocations of household furniture with capital code 999 have both residential and nonresidential uses. The estimates for residential use conform to the NIPA estimates of landlord durables and are allocated to I-0 71. The nonresidential component of these product codes and those with no landlord durable component were allocated to selected using industries on the basis of product descriptions and the advice of analysts in the industry. The estimate of mattresses (2515115 and 25152) allocated to private hospitals (I-0 77) was made by multiplying the allocation to State and local government hospitals by the ratio of the number of private hospital beds to the number under State and local jurisdictions in 1972. Data are from *Statistical Abstract of the U.S. 1976*, table 125.

Commodity 23 - Other furniture and fixtures

\$2,746.9 million

Codes						
I-0	CAP GOOD	PRODUCT	I M P	PRODUCER VALUE	PURCHASER VALUE	PRODUCT DESCRIPTIONS
230100	3010	2521001	0	-39.8	-44.9	WOODEN OFFICE FURN., NSK
230100	3010	2521011	0	70.2	79.8	CHAIRS
230100	3010	2521021	0	11.6	13.3	SOFAS
230100	3010	2521032	0	46.5	52.9	EXECUTIVE TYPE DESKS
230100	3010	2521033	0	31.1	35.4	OTHER DESKS
230100	3010	2521039	0	16.9	19.2	MODULAR SERVICE UNITS
230100	3010	2521098	0	57.0	64.7	OTHER WOODEN OFFICE FURNITURE
230200	3010	2522001	0	-207.3	-234.3	METAL OFFICE FURNITURE, NSK
230200	3010	25221	0	191.5	217.3	METAL OFFICE SEATING
230200	3010	25222	0	153.5	174.2	METAL DESKS
230200	3010	25223	0	297.9	338.7	METAL CABINETS AND CASES
230200	3010	25224	0	107.8	122.4	OTHER METAL OFFICE FURNITURE
230300	3010	25311	0	22.1	25.4	SCHOOL FURNITURE EXC. CONCRETE
230300	3010	2531231	0	27.9	32.2	CHURCH PEWS
230300	3010	2531239	0	7.9	9.1	OTHER CHURCH FURN.
230300	3010	2531241	0	26.0	30.0	FOLDING TABLES
230300	3010	253125	0	68.6	78.9	CHAIRS AND SEATS
230300	3010	2531271	0	7.2	8.3	LIBRARY FURNITURE
230300	3010	2531298	0	27.1	31.3	OTHER PUBLIC BUILDING FURNITURE
230400	3010	2541001	0	108.1	120.4	WOODEN PARTITIONS, NSK
230400	3010	254113	0	29.8	33.1	WOODEN SHELVING AND LOCKERS
230400	3010	25413	0	354.0	393.9	WOODEN FIXTURES FOR STORES
230500	3010	254201	0	32.1	36.6	METAL PARTITIONS & FIXTURES, NSK
230500	3010	254219	0	16.6	18.7	OTHER METAL PARTITIONS-FREE STANDING
230500	3010	25422	0	236.0	266.3	METAL SHELVING AND LOCKERS
230500	3010	25423	0	95.2	107.5	METAL STORAGE RACKS AND ACCS.
230500	3010	25424	0	217.3	245.3	METAL STORE AND OFFICE FIXTURES
230600	3010	2591001	0	6.6	12.8	VENETIAN BLINDS AND SHADES, NSK
230600	3010	2591100	0	.2	.3	WINDOW SHADES & DRAPERIES, NSK
230600	3010	259112	0	12.9	25.2	WINDOW SHADES. CLOTH, PLASTIC, ETC.
230600	3010	2591200	0	.3	.5	VENETIAN BLINDS, NSK
230600	3010	259123	0	4.2	8.3	COMPLETE VENETIAN BLINDS
230600	3010	2591271	0	.8	1.5	UNASSEMBLED BLINDS
230600	3010	2591298	0	2.7	5.4	OTHER SHADES AND BLINDS
230700	3010	2599001	0	57.6	69.6	FURNITURE AND FIXTURES, NEC, NSK
230700	3010	2599001	1	1.9	2.1	IMPORTED FURNITURE AND FIXTURES, NEC, NSK
230700	3010	2599021	0	15.7	18.9	HOSPITAL BEDS
230700	3010	2599041	0	17.0	20.4	WOODEN RESTAURANT & CAFETERIA CHAIRS & STOOLS
230700	3010	2599045	0	30.1	36.2	METAL RESTAURANT & CAFETERIA CHAIRS & STOOLS
230700	3010	2599047	0	25.5	30.6	RESTAURANT BOOTHS, BARS & BACK BARS
230700	3010	2599048	0	102.9	123.4	OTHER RESTAURANT FURNITURE
230700	3010	2599098	0	96.6	116.0	OTHER FURNITURE & FIXTURES NEC. EXC. HOUSEHOLD
TOTALS				2387.8	2746.9	
MARGINS:						
TRANSPORT				68.4		
TRADE				290.7		
MARGIN TOTAL				359.1		

Distribution

Furniture for use in institutions (25311, 2531231, 2531239, and 2599021) was allocated to health, educational, and social services and nonprofit organizations, based on product descriptions. Restaurant furniture (2599041, 2599045, 2599047, and 2599048) was allocated to eating and drinking places (I-O 74).

General office furniture (2521011, 2521021, 2521039, 2521098, 25221, 25224, 254113, 254219, 259112, 259123, 2591271, and 2591298) was prorated to using industries on the basis of their employment of selected executive and clerical office personnel. Wooden executive desks (2521032) were prorated according to industries' employment of selected executives; other wooden desks (2521033) and metal cabinets (25223) were prorated on the basis of employment of selected clerical workers. Metal desks (25222) were first split between executive and secretarial desks on the basis of product detail on value of shipments in table 6A of the *1972 Census of Manufactures* and were then respectively prorated to using industries on the basis of their employment of selected executives and selected clerical workers.

Wooden fixtures (25413) and metal fixtures (25424) were each split between store, bank, and other fixtures on the basis of product detail on value of shipments in table 6A of the *1972 Census of Manufactures*. Store fixtures were sent to trade (I-O 69); bank fixtures were sent to finance and insurance (I-O 70); and other fixtures were prorated to using industries according to their employment of selected office personnel. Metal shelving and lockers (25422) were split between commercial shelving and other (noncommercial) shelving and lockers on the basis of product detail on value of shipments in table 6A of the *1972 Census of Manufactures*. Commercial shelving was split between retail trade (I-O 69) and all manufacturing industries, on the basis of employment of production workers, *Statistical Abstract of the United States, 1973*. The manufacturing portion was prorated to manufacturing industries based on their employment of stockhandlers and warehousemen. Noncommercial shelving and lockers were prorated to using industries based on employment of selected office personnel. Metal storage racks (25423) were prorated to industries on their employment of fork lift operatives, stockhandlers, and warehousemen.

Library furniture (2531271) was prorated to industries on the basis of employment of librarians and library attendants. Folding tables (2531241) were prorated to selected industries on the basis of their employment of food service workers. Chairs and seats for theaters and auditoria were prorated to industries likely to have public assembly facilities, based on their employment of ushers.

All other public building furniture (2531298) was allocated entirely to transportation (I-O 65) on the basis of the description of products made in SIC industry 2531.

From the description of products made in industry SIC 2599, all other furniture and fixtures, n.e.c. (2599098) consisted of furniture for factories and for bowling establishments. The furniture for factories was allocated to manufacturing industries and the bowling establishments' furniture was allocated to the amusements industry (I-O 76). This three-way split was based on information on capital expenditures in the *1972 Census of Manufactures* and the *1972 Census of Selected Service Industries*. The further allocation to manufacturing industries was based on employment of production workers, reported in the *1972 Census of Manufactures* (Volume I).

Commodity 27 - Chemicals and selected chemical products\$164.2 million

<u>Codes</u>						
I-O	CAP GOOD	PRODUCT	I M P	PRODUCER VALUE	PURCHASER VALUE	PRODUCT DESCRIPTIONS
270100	3020	2819098	0	164.2	164.2	CONTRACT WORK PERFORMED
TOTALS				164.2	164.2	

Distribution

Contract work performed (2819098) was for the conversion, enrichment, and fabrication of uranium ore for reactors; it was allocated to electric utilities (I-0 68). Also see Commodity 8.

Commodity 32 - Rubber and miscellaneous plastics products\$50.4 million

<u>Codes</u>						
I-O	CAP GOOD	PRODUCT	I M P	PRODUCER VALUE	PURCHASER VALUE	PRODUCT DESCRIPTIONS
320302	999	3069351	0	12.2	13.9	LATEX FOAM CARPET & RUG CUSHIONS
320302	999	3069371	0	20.4	23.3	CHEMICALLY BLOWN SPONGE CARPET & RUG CUSHION
320400	999	3079241	0	11.6	13.2	FOAMED CARPET & RUG CUSHIONS
TOTALS				44.2	50.4	
MARGINS:						
TRANSPORT				1.6		
TRADE				4.6		
MARGIN TOTAL				6.2		

Distribution

Carpets and rug cushions (3069351, 3069371, and 3079241) were allocated to various industries based on information provided in a *Newsweek* (May 1973) study, "The New and Replacement Contract Carpeting Study." Some specific categories of use could be allocated directly to I-0 industries. The category for general office use was prorated to selected industries on the basis of their employment of office managers, managers, and administrators.

Commodity 37 - Primary iron and steel manufacturing\$2.1 million

<u>Codes</u>						
I-O	CAP GOOD	PRODUCT	I M P	PRODUCER VALUE	PURCHASER VALUE	PRODUCT DESCRIPTIONS
370402	3020	3399098	0	2.1	2.1	CONTRACT WORK PERFORMED
TOTALS				2.1	2.1	

Distribution

Contract work performed by establishments producing primary metal products, n.e.c. (3399098) was identified as the fabrication of nuclear fuel. It was split arbitrarily between chemicals and selected chemical products (I-0 27) and electric utilities (I-0 68).

Commodity 38 - Primary nonferrous metals manufacturing

\$68.7 million

<u>Codes</u>						
I-O	CAP GOOD	PRODUCT	I M P	PRODUCER VALUE	PURCHASER VALUE	PRODUCT DESCRIPTIONS
381000	3062	335743	0	64.0	68.7	OTHER COMMUNICATION WIRE & CABLE
TOTALS				64.0	68.7	
MARGINS:						
TRANSPORT				1.0		
TRADE				3.7		
MARGIN TOTAL				4.7		

Distribution

Other communication wire and cable (335743) is used by telephone companies in customer stations and central offices. Therefore, the entire value was allocated to communications, except radio and TV (I-0 66).

Commodity 39 - Metal containers

\$14.6 million

<u>Codes</u>						
I-O	CAP GOOD	PRODUCT	I M P	PRODUCER VALUE	PURCHASER VALUE	PRODUCT DESCRIPTIONS
390200	3020	34123	0	13.0	14.6	ALL OTHER BARRELS INCLUDING BEER & MILK
TOTALS				13.0	14.6	
MARGINS:						
TRANSPORT				.6		
TRADE				1.0		
MARGIN TOTAL				1.6		

Distribution

Beer barrels (34123) were allocated entirely to food and kindred products (I-0 14), on the basis of product usage.

Commodity 40 - Heating, plumbing, and fabricated structural
metal products

\$1,273.2 million

Codes			PRODUCER		PURCHASER		PRODUCT DESCRIPTIONS
I-O	CAP GOOD	PRODUCT M	P	VALUE	VALUE		
400600	3020	3443000	0	69.9	73.7		FABRICATED METAL PLATEWORK, NSK
400600	3020	3443000	1	.1	.1		IMPORTED FABRICATED METAL PLATEWORK, NSK
400600	3020	3443098	0	36.5	36.5		CONTRACT WORK PERFORMED
400600	3020	34431	0	365.3	385.1		HEAT EXCHANGERS AND STEAM CONDENSERS
400600	3020	34434	0	84.0	88.6		GAS CYLINDERS
400600	3020	3443500	0	9.0	9.5		METAL TANKS COMPLETE AT FACTORY, NSK
400600	3020	3443512	0	8.7	9.2		PRESSURE TRUCK TANKS, LPG
400600	3020	3443524	0	12.4	13.1		PRESSURIZED LPG TANKS EXCLUDING ALUMINUM & CARBON STEEL
400600	3020	3443526	0	1.9	2.0		PRESSURIZED ALUMINUM LPG TANKS
400600	3020	3443535	0	11.2	11.9		AIR RECEIVERS TANKS
400600	3020	3443538	0	61.2	64.5		OTHER PRESSURE TANKS
400600	3020	3443700	0	5.7	5.9		NON PRESSURE METAL TANKS, NSK
400600	3020	3443702	0	38.2	40.3		ALLOY BULK TANKS, NON PRESSURE
400600	3020	3443725	0	6.7	7.1		OILFIELD BOLTED TANKS, NON PRESSURE
400600	3020	3443743	0	20.1	21.2		NON PRESSURE TRUCK TANKS FOR LIQUID FUELS EXCLUDING LPG
400600	3020	3443745	0	12.7	13.4		NON PRESSURE TRUCK TANKS FOR OTHER LIQUIDS
400600	3020	3443798	0	6.5	6.9		MISC. NON PRESSURE TANKS INCLUDING TRAILER & SEPTIC
400600	3020	3443800	0	20.8	21.9		CUSTOM MADE TANKS & VESSELS, NSK
400600	3020	3443801	0	120.5	127.1		CARBON STEEL TANKS & VESSELS, CUSTOM MADE
400600	3020	3443806	0	54.4	57.3		ALLOY TANKS & VESSELS, CUSTOM MADE
400600	3020	3443808	0	7.0	7.4		ALUM TANKS & VESSELS, CUSTOM MADE
400600	3020	3443815	0	15.4	16.2		LPG TANKS CUSTOM MADE
400600	3020	3443818	0	91.4	96.4		MISC. TANKS & VESSELS, CUSTOM MADE
400700	3020	3444600	0	11.9	13.2		OTHER SHEET METALWORK, NSK
400700	3020	3444601	0	51.4	62.5		RESTAURANT AND HOTEL SHEETMETAL EQUIPMENT
400700	3020	3444621	0	60.0	67.0		GRAIN BINS AND VATS
400700	3020	3444625	0	13.7	15.2		OTHER BINS AND VATS
TOTALS				1196.6	1273.2		
MARGINS:							
TRANSPORT				19.1			
TRADE				57.5			
MARGIN TOTAL				76.6			

Distribution

The following product codes were allocated on the advice of an industry spokesman to a single industry as the most likely user.

<u>Product code</u>	<u>Using I-0 industry</u>
3443512	31
3443524	69
3443526	69
3443625	8
3443743	31
3443745	14
3443815	31
3444625	1

Nonpressure alloy bulk tanks (3443702) were split initially into milk storage and other tanks, according to product detail on value of shipments in table 6A of the *1972 Census of Manufactures*. Milk storage tanks were allocated to the food processing industry (I-0 14). The other tanks were split between food processing (I-0 14) and chemicals (I-0 27) in proportion to their expenditures for new machinery and equipment.

Nonpressure alloy bulk tanks (3443702) were split initially into milk storage and other tanks, according to product detail on value of shipments in table 6A of the *1972 Census of Manufactures*. Milk storage tanks were allocated to the food processing industry (I-0 14). The other tanks were split between food processing (I-0 14) and chemicals (I-0 27) in proportion to their expenditures for new machinery and equipment.

From advice by private industry sources, gas cylinders (34434) were split 50 percent to dealers (I-0 69) and 50 percent to gas manufacturers. The manufacturers' share was split between LPG made in industry 31 and other gases made in industry 27. The split was based on product detail for the value of shipments of LPG cylinders and other cylinders in table 6A of the *1972 Census of Manufactures*.

Product code 34431 was split into its two components, heat exchangers and steam condensers, on the basis of product detail on value of shipments from table 6A, *1972 Census of Manufactures*. Steam condensers were prorated to industries on the amount of electric energy generated from data in the *1972 Statistical Yearbook of the Electric Utility Industry* and the *Fuels and Electric Energy Consumed*, supplements to the *1972 Census of Manufactures* and *1972 Census of Mineral Industries*. Heat exchangers were prorated across fuel consumption for selected industries on the advice of persons in the industry.

Since purchases of air receivers (3443535) parallels that of air compressors, their value was allocated to industries in proportion to their purchases of replacement parts for pumps and compressors, as estimated in the output analysis of the pumps and compressors manufacturing industry (I-0 49.0100).

Restaurant sheet metal equipment (3444601) was split between eating and drinking places (I-0 74), and hospitals (part of I-0 77). The split was made in proportion to the inputs of food used by the two industries from the worksheets for the current account I-0 table.

Other miscellaneous tanks (3443538, 3443798, 3443806, 3443808, and 3443818) were prorated to the using industries based on expenditures for new machinery and equipment, as reported in the *1972 Census of Manufactures* (Volume I, section 4).

Custom-made carbon steel pressure tanks (3443801) are used primarily for storing water under pressure. The value was prorated on the amount of process-water used by each industry, as reported in the *1972 Census of Mineral Industries* and the *1972 Census of Manufactures* (Volume I, Special Statistics).

Contract work performed (3443098) was assumed to be on all types of custom-made tanks and vessels under SIC 34438 and was prorated across PDE purchases by industry of SIC 34438 products.

Bins and vats for grain (3444621) were split between farm and nonfarm use based on data from *Agricultural Statistics*. According to this, 63 percent of the grain was held on farms. The 37 percent held elsewhere was split between warehousing (I-0 65) and wholesale trade (I-0 69) on the basis of sales and inventory data reported in the *1972 Census of Wholesale Trade*, Volume I, chapter 4, tables 6 and 12.

Codes						
I-O	CAP GOOD	PRODUCT	I M P	PRODUCER VALUE	PURCHASER VALUE	PRODUCT DESCRIPTIONS
420202	3020	3425013	0	10.7	13.0	INSERTED-TOOTH CIRCULAR WOODWORKING BLADES
420202	3020	3425017	0	4.1	4.9	BAND SAW BLADE OVER 2 INCHES
420202	3020	3425019	0	9.1	11.1	ALL OTHER WOODWORKING BLADES (JIG, SCROLL)
420202	3020	3425031	0	6.5	7.8	CIRCULAR METALWORKING SAW BLADES
420800	3020	34901	0	20.9	25.0	UNDISTRIBUTED VALVES, PIPES, AND FITTINGS
420800	3020	3494001	0	.3	.3	VALVES & PIPE FITTINGS NSK.
420800	3020	3494101	0	157.6	187.1	AUTOMATIC REGULATING & CONTROL VALVES
420800	3020	3494301	0	212.0	252.0	INDUSTRIAL VALVES INCLUDING SOLENOID & FITTINGS
420800	3020	3498	0	99.2	112.7	FABRICATED PIPE & FITTINGS, TOT.
421100	3020	3499001	0	43.6	50.9	FABRICATED METAL PRODUCTS NEC., NSK
421100	3020	34991	0	149.2	171.7	SAFES AND VAULTS
TOTALS				713.2	836.5	
MARGINS:						
TRANSPORT				14.9		
TRADE				108.4		
MARGIN TOTAL				123.3		

Distribution

Woodworking blades (3425013, 3425017, and 3425019) were allocated to sawmills (I-0 20) on the basis of product description and usage on the advice of commodity analysts in the Industry and Trade Administration of the U.S. Department of Commerce.

Metalworking blades (3425031) were prorated using the distribution of cutoff and sawing machines per industry, as reported in *The 11th American Machinist Inventory of Metalworking Equipment, 1973*. In the few cases where the reported industry categories included more than one I-0 industry, the value was split on the basis of capital expenditures for new equipment, as reported in the *1972 Census of Manufactures*.

The allocation of valves and pipe fittings (3494101, 3494301, 3498, and 34901) followed the 1972 I-0 analysis of the industry. End-use studies by the valve industry provided data on the principal users of valves. Use of fittings was assumed to parallel that of valves. Information provided by the Bureau of the Census, trade associations, and private industry sources allowed end-use categories to be coded to the I-0 level. Distinctions between PDE and construction items had been made by the I-0 construction analyst.

The value of valves and fittings, n.s.k. (code 3494001) was small and sent 100 percent to the chemical industry (I-0 27).

Safes and vaults (34991) were split into three major components on the basis of the *1972 Census of Manufactures*, table 6A, value of shipments: safes and chests, safe deposit boxes, and bank and security equipment. For 1967, an industry analyst estimated that safes and chests were used 85 percent for handling cash receipts and 15 percent for payroll purposes. No better information was available for 1972. Thus, 85 percent of the value of safes and chests was prorated on the number of cashiers employed in each industry and 15 percent of the value was prorated on the number of payroll clerks. Safe deposit boxes and other bank and security equipment were allocated 100 percent to finance and insurance (I-0 70).

Fabricated metal products, n.e.c., n.s.k., (3499001) was allocated in proportion to the allocation of code 34991, safes and vaults.

Codes						
I-O	CAP GOOD	PRODUCT	I M P	PRODUCER VALUE	PURCHASER VALUE	PRODUCT DESCRIPTIONS
430100	3030	3511001	0	1365.8	1421.6	TURBINES & TURBINE GENERATOR SETS, EXCEPT PARTS
430100	3030	3511099	0	6.0	6.0	MISC. RECEIPTS
430200	3030	3519001	0	199.6	219.4	ALL ENGINES, NEC, EXCEPT OUTBOARD
430200	3030	3519099	0	1.7	1.7	MISCELLANEOUS RECEIPTS
430200	3030	35195	0	33.2	36.6	OUTBOARD MOTORS
TOTALS				1606.3	1685.3	
MARGINS:						
TRANSPORT				26.8		
TRADE				52.2		
MARGIN TOTAL				79.0		

Distribution

In the I-0 analysis of the steam engines and turbines industry (I-0 43.0100), the value for product code 3511001 was split into two components, turbine generator sets and mechanical drive turbines. Turbine generator sets were prorated to industries on the basis of electric energy produced, using data in "Fuels and Electric Energy Consumed," in the Special Reports series of the *1972 Census of Mineral Industries* and *1972 Census of Manufactures*, and from the Edison Electric Institute *1972 Statistical Year Book*.

Mechanical drive turbines were prorated to manufacturing industries, using a survey of horsepower of non-mobile prime movers by industry from the *1963 Census of Manufactures*. The horsepower figures were updated to 1972 by applying the percentage change in kilowatt-hour equivalent of energy consumed between 1962 and 1971, as reported in tables 6 and 8 of "Fuels and Electric Energy Consumed," in the Special Reports series of the *1972 Census of Manufactures*.

The miscellaneous receipts (3511099) allocated to PDE are for contract installation work and were allocated solely to the utilities industry (I-0 68) on the advice of consultants in that industry.

In the I-0 industry analysis of I-0 43.0100, all engines except outboard (3519001) were split between small gasoline engines, under 11 horsepower, and all other engines. The small gasoline engines allocated to PDE were judged to be for replacement and so were further split into broad categories of use based on the ratio of: (a) original equipment (OEM) engines purchased by particular industries to, (b) the total value of shipments of these engines as determined during the output analysis of I-0 43.01. Further breakdowns to I-0 levels were based on information from a number of sources, including the USDA *Farm Production Expenditures* survey, an analysis of the use of replacement parts, and industry employment by occupation. A residual value of about one-third of the total was sent to construction (I-0 11).

Similar methods were used to allocate "all other" engines within product code 3519001 to industries outside mining and manufacturing. The allocation to the transportation industry (I-0 65) is composed of estimates for railroads and for marine transportation. The allocation of "all other" engines to railroads was in proportion to the percentage of all engine repair parts which were purchased by railroads. The allocation to marine transportation was in proportion to the percentage of all OEM engines which were purchased by the shipbuilding industry.

The allocation to agriculture was based on information in the *1971 Farm Production Expenditures* survey; the allocation to utilities was based on information supplied by a utilities consulting firm and that in the Edison Electric Institute's, *1972 Statistical Year Book*; the allocation for construction was judgmentally estimated by the I-0 construction analyst; and the residual was prorated to mining and manufacturing industries based on the updated Census horsepower survey used for product code 3511001.

Miscellaneous receipts (3519099) are for installation work and were prorated to industries on the basis of their PDE purchases of large engines.

Outboard motors (35195) was split between commercial fishing (I-0 3) and water transportation (I-0 65), using the allocation of boat repair expenses to these two industries from the current account I-0 table.

Commodity 44 - Farm and garden machinery

\$4,921.8 million

Codes						
I-O	CAP	GOOD	PRODUCT	I	PRODUCER	PURCHASER
				M	VALUE	VALUE
				P		PRODUCT DESCRIPTIONS
440001	999	3523001	0		3144.7	3654.1
440001	999+	3523001	1		222.0	237.1
440002	3040	35242	0		259.9	315.4
440002	3040	35242	1		21.7	22.4
440002	3090	35247	0		527.4	661.4
440002	3051	3524911	0		26.0	31.4
TOTALS					4201.7	4921.8
MARGINS:						
TRANSPORT					109.6	
TRADE					610.5	
MARGIN TOTAL					720.1	

Distribution

Farm machinery and equipment (3523001) were first split between tractors and other farm machinery, using product detail on values of shipments from table 6A of the *1972 Census of Manufactures* and the output analysis of I-0 44. The value of tractors going to agriculture came from the USDA publication *Farm Production Expenditures*, 1972. The remaining value for tractors was sent to construction. Other farm machinery was allocated to agriculture, agricultural services, and real estate and rental industries based on the I-0 analysis of purchases of replacement parts.

The values for garden tractors and motor tillers (35242) and for power hedge trimmers (3524911) were prorated to all industries on the basis of their employment of gardeners and groundskeepers.

The value for lawnmowers and snow blowers (35247) was broken into more detailed products with information from table 6A in the 1972 *Census of Manufactures*. With the aid of Industry and Trade Administration analysts, the percentage of each product going to owner-occupied housing in I-O 71 was estimated judgmentally. Approximately 70 percent of the value was allocated to owner-occupied housing, while the remaining 30 percent was prorated to all industries on the basis of their employment of gardeners and groundskeepers.

Commodity 45 - Construction and mining machinery

\$4,393.8 million

Codes						
I-O	CAP GOOD	PRODUCT	I M P	PRODUCER VALUE	PURCHASER VALUE	PRODUCT DESCRIPTIONS
450100	999	3531	0	-89.4	-104.3	CONSTRUCTION MACHINERY, NSK
450100	3052	3531000	1	29.3	32.1	IMPORTED CONSTRUCTION MACHINERY, NSK
450100	3052	3531099	0	3.3	3.3	MISC. RECEIPTS
450100	3040	35311	0	179.3	211.2	OFF HIGHWAY WHEEL TRACTORS
450100	3040	35311	1	27.3	29.6	IMPORTED OFF HIGHWAY WHEEL TRACTORS
450100	3040	35312	0	307.4	361.7	TRACKLAYING-TYPE TRACTORS
450100	3040	35312	1	7.7	8.4	IMPORTED TRACKLAYING-TYPE TRACTORS
450100	3052	3531411	0	540.5	636.3	POWER CRANES, DRAGLINES, SHOVELS
450100	3052	35316	0	229.3	270.0	MIXERS, PAVERS, RELATED EQUIPMENT
450100	3052	35317	0	630.7	742.2	TRACTOR SHOVEL LOADERS
450100	3052	35317	1	2.6	2.8	IMPORTED TRACTOR SHOVEL LOADERS
450100	3052	35318	0	751.5	884.1	SCRAPERS, GRADERS, ROLLERS, AND OFF-HIGHWAY TRUCKS
450100	3052	3531901	0	428.8	505.8	CONSTRUCTION MACHINERY NEC EXCLUDING PARTS
450200	3053	3532000	1	6.9	7.4	IMPORTED MINING MACHINERY & EQUIPMENT
450200	3053	3532002	0	21.7	24.4	MINING MACHINERY, NSK
450200	3053	35321	0	158.2	178.0	UNDERGROUND MINING & MINERAL BENEFICIATION MACHINERY
450200	3053	35322	0	85.8	96.5	CRUSHING, PULVERIZING, SCREENING MACHINERY
450200	3053	35323	0	59.2	66.6	MINING MACHINERY NEC
450200	3053	3532425	0	18.5	20.8	CONSTRUCTION ROCK DRILLS
450200	3053	3532450	0	45.3	50.9	PARTS AND ATTACHMENTS FOR MINING MACHINERY NEC
450300	3053	3533110	0	34.7	38.6	ROTARY DRILLING SURFACE EQUIPMENT
450300	3053	3533148	0	32.7	36.2	SUBSURFACE DRILL EQUIPMENT EXCLUDING BITS & REAMERS
450300	3053	3533240	0	21.8	24.3	CABLE TOOL, CEMENTING, SHOE, FLOATING, GUIDING EQUIPMENT
450300	3053	3533398	0	204.0	226.6	OILFIELD PRODUCTION MACHINERY NEC
450300	3053	3533412	0	15.9	17.5	PORTABLE RIGS, OIL AND GASFIELD
450300	3053	3533416	0	5.9	6.6	PORTABLE RIGS, WATERWELL & BLASTHOLE
450300	3053	3533421	0	11.6	12.8	PORTABLE DERRICKS
450300	3053	3533431	0	3.1	3.4	WELL SURVEYING MACHINERY AND EQUIPMENT
TOTALS				3773.6	4393.8	
MARGINS:						
TRANSPORT				54.8		
TRADE				565.4		
MARGIN TOTAL				620.2		

Distribution

Off-highway wheel tractors (35311) and tracklaying-type tractors (35312) were allocated to industries in proportion to the employment of excavating, grading, and road machine operators.

Power cranes, draglines, and shovels (3531411) were divided into three categories: (1) walking draglines and walking cranes; (2) other nonconstruction cranes; and (3) cranes used for construction. Since this product detail was not available for 1972, an estimate for walking draglines and walking cranes was made by assuming the same rate of increase in output between 1967 and 1972 as that for the entire code 3531411 between 1967 and 1972. This estimate together with an arbitrarily equal amount of cranes used for construction was allocated to the mining industries. Ten percent of the combined estimate was assigned to crude petroleum and natural gas (I-0 8), and the remaining 90 percent of the combined estimate was prorated to the other mining industries on the basis of their expenditures for new equipment. An estimate for other nonconstruction cranes was derived from table 6A-2 for SIC 3536 in the *1972 Census of Manufactures* and was prorated to the nonmining, nonconstruction industries according to their employment of crane operators. The large residual was allocated entirely to the construction industry (I-0 11, 12).

Mixers, pavers, and related equipment (35316) were split into three categories for allocation to using industries: (1) asphalt and central mixing plants; (2) concrete batching plants; and (3) other equipment, based on product detail on value of shipments in table 6A-3 for SIC 3531 in the *1972 Census of Manufactures*. Asphalt and concrete mixing plants were allocated entirely to the paving mixtures and blocks industry (part of I-0 31). In the opinion of the I-0 construction industry analyst, one-half of the third category should be allocated to stone and clay products (I-0 36). The remainder was sent to the construction industry (I-0 11, 12).

Tractor shovel loaders (35317) were prorated to the mining and construction industries (I-0 11, 12) on the basis of number of bulldozer operators and excavating, grading, and road machine operators employed in those industries.

Scrapers and rollers, off-highway equipment, excluding tractors, and machinery for mounting on tractors (35318) were broken into three components based on product detail for value of shipments in table 6A-3 of the *1972 Census of Manufactures*.

1. Scrapers, rollers and graders were assumed to be used exclusively for construction activities and were distributed entirely to construction (I-0 11, 12).
2. Within off-highway equipment, rear backhaulers for carrying earth, rocks, and ore were split equally between the construction (I-0 11, 12) and mining industries on the basis of descriptions appearing in the *1972 Census of Manufactures*, table 6A-3. The mining estimate was prorated to the mining industry excluding I-0 8, according to their capital expenditures for new equipment. The remaining off-highway equipment, consisting of truck-tractor type haulers and all other off-highway type equipment, was allocated to construction (I-0 11, 12) and to the logging camps and sawmills industries (I-0 20) according to the number of truck drivers employed in these two industries.

3. The machinery for mounting tractors was prorated to industries employing excavating, grading, and road machine operators, after an arbitrary small portion was allocated for agricultural use to I-0 2.

Construction machinery, n.e.c. (3531901) was split into four categories in proportion to the value of shipments of these product lines as indicated in table 6A-3 of the *1972 Census of Manufactures*.

1. Machinery for crushing, screening, washing, or combination plants was split arbitrarily between mining and construction based on the advice of industry analysts. The mining portion was prorated to mining industries other than petroleum (I-0 8) in proportion to their capital expenditures for new equipment, *1972 Census of Mineral Industries*.
2. Self-propelled continuous ditchers and trenchers went entirely to construction (I-0 11, 12) as judged from the product-line description.
3. Portable water-well and blasthole drills were allocated entirely to the construction and mining industries based on the number of blasters, powdermen, and earth drillers employed in these industries.
4. The residual--accounting for about 70 percent--of product code 3531901 was assumed to be used entirely by construction.

Construction machinery n.s.k. (3531) and miscellaneous receipts (3531099) were spread proportionately over the other product codes comprising construction machinery and equipment (I-0 45.0100).

Mining machinery (except oilfield).--The procedure for allocating mining machinery under product group 3532 was first to allocate a small share to construction (I-0 11, 12) on the advice of the construction industry analyst and then to allocate the residual to the mining industries.

1. Allocations to construction consist of an arbitrary five percent of crushing, pulverizing, and screening equipment (3532200) and an arbitrary 25 percent of construction rock drills (3532425).
2. All the remaining amounts of these codes and the other product codes in SIC 3532 were allocated to the mining industries, except petroleum mining (I-0 8), in proportion to their capital expenditures on new equipment, *1972 Census of Mineral Industries*.

Oilfield machinery.--Oilfield production equipment, n.e.c. (3533398) was allocated to the crude petroleum and natural gas industry (I-0 8). All other product codes under group 3533 were allocated to the construction industry (I-0 11, 12).

Codes						PRODUCT DESCRIPTIONS
I-O	CAP GOOD	PRODUCT	I M P	PRODUCER VALUE	PURCHASER VALUE	
460200	3056+3535010	0	0	632.6	707.0	CONVEYORS, EXCEPT PORTABLE & UNDERGROUND
460200	3056 3535152	0	0	18.9	21.1	PORTABLE AND UNDERGROUND CONVEYORS
460300	3056+3536002	0	0	179.1	191.9	HOISTS, CRANES, AND STACKING MACHINES
460400	3056+3537010	0	0	629.8	684.3	INDUSTRIAL RIDER & PEDESTRIAN OPERATED TRUCKS & TRACTORS
460400	3056+3537020	0	0	124.2	135.2	PALLETIZERS, HAND TRUCKS & TRAILERS, NSK TRUCKS & TRACTORS
460400	3056+3537020	1	1	52.7	56.4	IMPORTED PALLETIZERS, HAND TRUCKS & TRAILERS, ETC.
460400	3056 3537151	0	0	3.2	3.5	PORTABLE ELEVATORS EXCLUDING FARM
TOTALS				1640.5	1799.4	
MARGINS:						
TRANSPORT				68.4		
TRADE				90.5		
MARGIN TOTAL				158.9		

Distribution

Conveyors (3535010), industrial trucks and tractors (353701) and palletizers, hand trucks and trailers, and n.s.k. trucks and tractors (3537020) were first split between industrial and commercial users and trade and repair shops in proportion to the sales of materials handling equipment to major users reported by merchant wholesalers under SIC 5084 as reported in the *1972 Census of Wholesale Trade, Sales by Class of Customers*. Of the trade and repair portion, small arbitrary allocations were made to utilities (I-0 68) and the rest was allocated to trade (I-0 69). No allocation was made to repair services industries. The industrial and commercial portion of each product code was distributed to those two-digit SIC industries which reported purchases of materials handling equipment during 1963, as published in 1964 in a market survey of Cahners Publishing Company entitled *The Modern Materials Handling Market*. After a few judgmental adjustments, further splits to I-0 industries were made using capital expenditures for new machinery and equipment reported in the 1972 economic censuses.

Small allocations of hoists, cranes, and monorails (3536002) were made arbitrarily to I-0 industries 5, 6, 7, 10, 11, 12, 65, 69, and 75. The remaining 82 percent was prorated on the basis of the Cahner's study and broken into finer detail by the same methods used for conveyors.

Portable and underground conveyors (3535152) were split into two components, using information from the *1963 Census of Manufactures*, the most recent available product detail. All underground conveyors were allocated to mining and were distributed to the separate mining industries--except crude petroleum, natural gas, and stone and clay mining--by prorating over the expenditures for new equipment reported in the *1972 Census of Mineral Industries*. Portable conveyors were judgmentally split 10 percent to construction (I-0 11, 12) and 90 percent to transportation (I-0 65).

All nonagricultural portable elevators (3537151) were assumed to be used entirely by construction (I-0 11, 12).

Codes			I M P	PRODUCER VALUE	PURCHASER VALUE	PRODUCT DESCRIPTIONS
I-O	CAP GOOD	PRODUCT				
470100	3054	3541	0	-70.7	-74.8	UNDISTRIBUTED METAL CUTTING MACHINE TOOLS
470100	3054	3541000	1	83.5	89.5	IMPORTED UNDISTRIBUTED METAL CUTTING MACHINE TOOLS
470100	3054	3541099	0	3.7	3.7	MISC. RECEIPTS
470100	3054	35411	0	54.2	57.5	BORING MACHINES
470100	3054	35412	0	69.2	73.4	DRILLING MACHINES
470100	3054	35413	0	31.6	33.5	GEAR CUTTING & FINISHING MACHINERY
470100	3054	35413	1	5.1	5.4	IMPORTED GEAR CUTTING & FINISHING MACHINERY
470100	3054	35414	0	149.9	159.2	GRINDING & POLISHING MACHINES
470100	3054	35415	0	186.9	198.5	LATHES
470100	3054	35416	0	78.8	83.7	MILLING MACHINES
470100	3054	354186	0	26.0	32.0	OTHER MACHINE TOOLS PRIMARILY FOR HOME SHOPS
470100	3054	354189	0	263.4	280.0	ALL OTHER METAL-CUTTING MACHINE TOOLS
470100	3054	3541941	0	39.1	41.5	REBUILT METAL-CUTTING MACHINE TOOLS
470200	3054	3542	0	-6.4	-6.7	UNDISTRIBUTED METAL FORMING MACHINES & METAL PRESSES
470200	3054	3542000	1	28.7	30.8	IMPORTED METAL FORMING MACHINES & METAL PRESSES
470200	3054	3542099	0	.1	.1	MISC. RECEIPTS
470200	3054	35421	0	141.8	150.3	PUNCHING, SHEARING, BENDING & FORMING MACHINES
470200	3054	35421	1	4.9	5.2	IMPORTED PUNCHING, SHEARING, BENDING & FORMING MACHINES
470200	3054	35422	0	157.1	166.6	PRESSES, INCLUDING FORGING PRESSES
470200	3054	35423	0	131.3	139.2	OTHER METAL-FORMING MACHINE TOOLS
470200	3054	3542475	0	14.1	14.8	REBUILT METAL FORMING MACHINE TOOLS
470300	3054	3540	0	-8	-8	UNDISTRIBUTED MOLDS, JIGS & FIXTURES
470300	3054	3544099	0	1.1	1.1	MISC. RECEIPTS
470300	3054	35441	0	1136.4	1158.3	JIGS, FIXTURES, DIES & TOOLS
470300	3054	3544213	0	5.3	5.4	FOUNDRY MOLDS
470300	3054	354429	0	502.5	512.1	ALL OTHER INDUSTRIAL MOLDS
470300	3054	354429	1	39.5	42.1	IMPORTED ALL OTHER INDUSTRIAL MOLDS
470401	3054	3546	0	-10.9	-12.3	UNDISTRIBUTED POWER DRIVEN HANDTOOLS
470401	3054	35461	0	208.2	269.8	POWER DRIVEN HANDTOOLS, ELEC, EXCLUDING PARTS
470401	3054	35462	0	133.9	173.1	PNEUMATIC AND POWDER ACTUATED HANDTOOLS
470402	3054	3547	0	170.1	194.6	ROLLING MILL MACHINERY
470402	3054	3547099	0	.3	.3	MISC. RECEIPTS
470403	3054	3549	0	-10.5	-11.5	UNDISTRIBUTED METALWORKING MACHINERY, NEC.
470403	3054	3549099	0	.3	.3	MISC. RECEIPTS
470403	3054	35493	0	74.6	96.2	WELDING AND CUTTING APPARATUS
470403	3054	3549411	0	101.3	130.9	AUTOMOTIVE MAINTENANCE EQUIPMENT
470403	3054	35495	0	129.9	144.6	OTHER METALWORKING MACHINERY
470403	3054	3549500	1	4.9	5.2	IMPORTED OTHER METALWORKING MACHINERY

TOTALS	3878.4	4192.8
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MARGINS:	
TRANSPORT	21.9
TRADE	292.5

MARGIN TOTAL	314.4
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Distribution

Metal cutting and forming machine tools.--All products under groups 3541 and 3542, with the exception of product codes 354189 and 3542099, were prorated over the stocks of metalworking machines held by industries reported in *The 11th American Machinist Inventory of Metalworking Equipment, 1973*. When necessary, further splits were made in proportion to the detailed industries' capital expenditures on new equipment, as reported in the *1972 Economic Censuses*.

All other metalworking machine tools (354189) were split into three groups: machines specifically used in the automotive industry; drills, lathes, and saws; and other machines. The product detail for value of shipments reported in table 6A-1 in the *1972 Census of Manufactures* were used to estimate this initial three-way split. Machines specifically used in the automotive industry were allocated to I-0 59. Drills, lathes, and saws were prorated on the basis of the number of drill press, grinding machine, and precision machine operatives in the manufacturing and service industries. The remaining metal cutting machines were prorated using information from the American Machinist survey cited above.

Miscellaneous receipts (3542099) were allocated to the heating, plumbing, and fabricated structural metal products industry (I-0 40).

Jigs, fixtures, dies, and tools (35441).--Approximately 80 percent of this product code was allocated to motor vehicles (I-0 59), based on discussions with members of the four major motor vehicle manufacturers and persons in the Census Bureau. The remaining 20 percent of this product code was prorated over the combined stocks of metal cutting tools and metal forming tools reported for various industries in the American Machinist survey cited above.

Foundry molds (3544213) were allocated to selected primary and fabricated metals industries according to their production of castings. Allocations to each industry were derived from a prorate over 1972 capital expenditures on new equipment.

All other industrial molds (354429) were first split into four categories based on product detail for value of shipments in table 6A of the *1972 Census of Manufactures*:

1. Molds for rubber products were allocated to rubber and miscellaneous plastics products (I-0 32).
2. Die casting dies (molds) were prorated to manufacturing industries according to their employment of tool and die makers.
3. Molds for plastics were allocated to selected industries mainly on their use of plastic materials, supplemented by information from industry sources and information on capital expenditures for new equipment in the *1972 Census of Manufactures*.
4. Industrial molds made of materials other than metal and industrial molds, n.s.k. were allocated to the glass and glass products industry (I-0 35) and the stone and clay products industry (I-0 36) in proportion to their capital expenditures for new equipment reported in the *1972 Census of Manufactures*.

Miscellaneous receipts (3544099) were prorated to the various industries, using the allocations of the other product codes in this group. Undistributed metalworking machinery (3540) was distributed in proportion to allocations for codes 3544100 and 3544290.

Power driven hand tools.--Estimates of purchases of power driven handtools (35461 and 35462) by agriculture (I-0 1, 2) were derived from the U.S. Department of Agriculture report, *Farm Production Expenditures for 1971 by Economic Class*. The remaining power-driven hand tools were prorated to the nonagricultural industries which employed carpenters, electricians, auto body repairmen, auto mechanics, heavy equipment mechanics, brickmasons, stonemasons, and miscellaneous mechanics and repairmen. The "unallocated" code (3546) was distributed in proportion to product code 3546100.

Rolling mill machinery.--Rolling mill machinery (3547) and miscellaneous receipts (3547099) were all allocated to primary iron and steel manufacturing (I-0 37) and primary nonferrous metals manufacturing (I-0 38) in proportion to their 1972 capital expenditures for new equipment, *1972 Census of Manufactures*.

Metalworking machinery, n.e.c.--A small amount of gas welding and cutting apparatus (35493) was allocated to agriculture (I-0 1, 2) based on data in the USDA report *Farm Production Expenditures for 1971 by Economic Class*. The remainder of this code was prorated to industries on the basis of their employment of welders and flame-cutters.

Automotive maintenance equipment (3549411) was prorated to industries on the basis of their employment of auto mechanics.

Other metalworking machinery (35495) was classified into four allocation categories based on product-line descriptions in table 6A of the *1972 Census of Manufactures*. Coil handling equipment (conversion or straightening) was allocated to selected using industries based on their expenditures for new capital equipment, *1972 Census of Manufactures*. Wire fabricating machines and wire drawing machines were similarly allocated. Assembly machines and other metalworking machinery were prorated over the combined stock of metal drilling and metal forming machines held by various industries, as published in the American Machinist survey cited earlier.

Codes

I-O	CAP GOOD	PRODUCT	I M P	PRODUCER VALUE	PURCHASER VALUE	PRODUCT DESCRIPTIONS
480100	3055	3551000	0	140.0	156.5	FOOD PRODUCTS MACHINERY, NSK
480100	3055	3551099	0	6.7	6.7	MISC. RECEIPTS
480100	3055	35511	0	49.5	55.0	MILK AND DAIRY PRODUCTS MACHINERY
480100	3055	3551201	0	145.5	161.7	COMMERCIAL FOOD PRODUCTS MACHINERY
480100	3055	3551301	0	208.4	231.8	OTHER INDUSTRIAL FOOD PRODUCTS MACHINERY
480100	3055	3551301	1	1.6	1.7	IMPORTED OTHER INDUSTRIAL FOOD PRODUCTS MACHINERY
480100	3055	3551401	0	153.4	170.5	PACKING, PACKAGING, AND BOTTLING MACHINERY FOR FOOD
480100	3055	3551401	1	1.9	2.0	IMPORTED PACKING, PACKAGING & BOTTLING MACH. FOR FOOD
480200	3055	3552000	0	39.3	40.7	TEXTILE MACHINERY, NSK
480200	3055	3552099	0	3.9	3.9	MISC. RECEIPTS
480200	3055	35521	0	294.1	305.2	TEXTILE MACHINERY
480200	3055	35521	1	375.2	376.3	IMPORTED TEXTILE MACHINERY
480200	3055	35522	0	151.9	158.1	PARTS AND ATTACHMENTS FOR TEXTILE MACHINERY
480300	3055	3553000	0	22.9	26.4	WOODWORKING MACHINERY, NSK
480300	3055	3553000	1	17.8	19.2	IMPORTED WOODWORKING MACHINERY, NSK
480300	3055	3553101	0	256.2	292.6	INDUSTRIAL WOODWORKING MACHINERY
480300	3055	3553181	0	35.2	40.1	PARTS FOR IND. WOOD MACHINERY
480300	3055	3553201	0	6.7	7.7	WOODEN WORKING MACHINERY FOR HOME
480300	3055	3553281	0	1.0	1.1	PARTS FOR HOME WOODWORKING MACHINERY
480400	3055	3554001	0	238.5	255.9	PULP AND PAPER INDUSTRIES MACHINERY
480400	3055	3554001	1	31.4	33.8	IMPORTED PULP AND PAPER INDUSTRIES MACHINERY
480500	3055	3555000	0	31.1	34.3	PRINTING TRADES MACHINERY, NSK
480500	3055	3555000	1	12.5	13.7	IMPORTED PRINTING TRADES MACHINERY, NSK
480500	3055	3555099	0	8.9	8.9	MISC. RECEIPTS
480500	3055	35551	0	122.8	134.8	LITHOGRAPHIC PRINTING PRESSES
480500	3055	35551	1	27.7	30.5	IMPORTED LITHOGRAPHIC PRINTING PRESSES
480500	3055	35552	0	76.4	83.8	PRINTING PRESSES OTHER THAN LITHOGRAPHIC
480500	3055	35552	1	15.2	16.6	IMPORTED PRINTING PRESSES OTHER THAN LITHOGRAPHIC
480500	3055	35553	0	90.0	98.7	TYPESETTING MACHINERY AND EQUIPMENT
480500	3055	35553	1	2.1	2.1	IMPORTED TYPESETTING MACHINERY AND EQUIPMENT
480500	3055	35554	0	22.3	24.4	BINDERY EQUIPMENT
480500	3055	3555563	0	8.6	9.6	ELECTROTYPE, STEREOTYPE, AND OTHER PRE-PRESS EQUIPMENT
480500	3055	3555568	0	22.9	25.1	PAPER CUTTING AND COLLATING MACHINES
480500	3055	3555572	0	24.7	27.0	ROLLERS, BLANKERS, PRINTER'S ROLLS, AND PLATENS
480500	3055	3555598	0	67.6	74.3	OTHER PRINTING MACHINES AND EQUIPMENT
480600	3055	3559	0	1374.9	1455.1	SPECIAL INDUSTRY MACHINERY NEC
480600	3055	3559	1	74.5	80.3	IMPORTED SPECIAL INDUSTRY MACHINERY NEC
480600	3020	3559098	0	18.8	18.8	CONTRACT WORK PERFORMED
480600	999	3559099	0	78.7	78.7	MISC. RECEIPTS
TOTALS				4260.8	4563.6	
MARGINS:						
TRANSPORT				36.0		
TRADE				266.8		
MARGIN TOTAL				302.8		

Distribution

Food products machinery.--All product codes in group 3551 were distributed to the food and kindred products industry (I-0 14) based on Census product descriptions, *Standard Industrial Classification Manual* descriptions, and information furnished by industry analysts.

Textile machinery.--All product codes in group 3552 were distributed in proportion to the employment of the following occupations in selected manufacturing industries: cording, lapping, and combine operatives; knitters, loopers, and toppers; spinners, twisters, and winders; weavers; and textile operatives, n.e.c.

Woodworking machinery.--Industrial woodworking machinery (3553101) was split into six products using information on value of shipments in table 6A of the *1972 Census of Manufactures*:

1. Sawmill equipment was distributed entirely to sawmills and logging camps (I-0 20).
2. Veneer, woodbox, cratemaking, and plywooding machinery was distributed entirely to the lumber and wood products industry (I-0 20) and the wood containers industry (I-0 21). The split between these two industries was in proportion to the number of carpenters, cabinetmakers, and furniture and wood finishers they employed.
3. Sawing machines were distributed to industries which fabricate wooden products (I-0's 20, 21, 22, 23, and 61). The distribution was based on the number of cabinetmakers, carpenters, and sawyers employed in these industries.
4. Some chainsaws were distributed to agricultural industries (I-0 1, 2) based on the USDA report, *Farm Expenditures for 1971 by Economic Class*. The remainder were judgmentally distributed to logging (I-0 20), forestry (I-0 3), coal mining (I-0 7), construction (I-0 11, 12), forestry services (I-0 4), and miscellaneous business services (I-0 73).
5. The jointers, matchers, and molders were distributed to the same industries which received sawing machines. The distribution was on the basis of employment of carpenters, cabinetmakers, and furniture and wood finishers.
6. Other woodworking machinery was distributed on the same basis as jointers, matchers, and molders. Parts for industrial woodworking machinery (3553181) were prorated parallel to the purchases by industry of industrial woodworking machinery.

The PDE allocations of home woodworking machinery (3553201) and parts for home woodworking machinery (code 3553281) were distributed equally to I-0 industries 11, 20, 22, and 23 on the basis of information received from a trade association spokesman.

Pulp and paper industries machinery.--Product code 3554001 was allocated to paper and allied products (I-0 24) and paperboard containers and boxes (I-0 25) in proportion to their 1972 capital expenditures on new equipment, *1972 Census of Manufactures*.

Printing trade machinery.--Lithographic printing presses (35551) were prorated to industries employing lithographers. Non-lithographic printing presses (35552) were prorated to the industries employing printers and pressmen. Typesetting machinery and equipment (3555300) were prorated to those industries employing compositors and typesetters. Bindery equipment (35554) was allocated entirely to industry 26, based on product-line description. Electrotyping and stereotyping preprint equipment (3555563) was prorated to all industries employing electrotypers and stereotypers. Paper cutting and collating machinery (3555568) was prorated to all industries

employing printers, pressmen, and lithographers. Rollers, blankers, and printers' rolls and platens (3555572) were also prorated to those industries employing printers, pressmen, and lithographers. Codes 3555000, 3555099, and 3555598 were prorated over the distribution of the other product codes comprising I-0 48.0500.

Special industry machinery, n.e.c.--Special industry machinery, n.e.c. (3559) was split into 19 groups based on the product detail for value of shipments, table 6A in the *1972 Census of Manufactures*.

The following products were allocated to a single-using industry as indicated by the product description:

Chemical manufacturing industries machinery and equipment
(M&E) allocated to I-0 27

Petroleum refining M&E allocated to I-0 31

Ammunition and explosives loading machinery allocated to
I-0 13

Tobacco manufacturing M&E allocated to I-0 15

Claymaking M&E allocated to I-0 36

Cementmaking M&E allocated to I-0 36

Concrete products M&E allocated to I-0 36

Glassmaking M&E allocated to I-0 35

Cotton ginning M&E allocated to I-0 4

Electronic tube making M&E allocated to I-0 57

The following products were allocated to more than one industry:

Foundry M&E was allocated to primary iron and steel (I-0 37) and the primary nonferrous metals industry (I-0 38) in proportion to their capital expenditures for new machinery and equipment.

Plastics-working M&E was allocated in the same way as was metal molds for plastics (354429). See commodity 47 above.

Rubber-working M&E was distributed to the tire recapping industry (I-0 75) and the rubber and miscellaneous plastics products industry (I-0 32) based on product detail for value of shipments in table 6A of the *1972 Census of Manufactures*.

Shoemaking and repairing M&E was split judgmentally between the shoe manufacturing industry (I-0 32) and shoe repair industry (I-0 72) based on employment of shoemaking machine operatives in the shoe manufacturing industry and paid employees in the shoe repair industry.

Metal cleaning, degreasing, finishing, and drying M&E was allocated to I-0 industries 41, 42, and 47 in proportion to their capital expenditures for new machinery and equipment.

Electric nonmetallic processing industrial furnaces and ovens, including kilns and lehrs, were allocated judgmentally to I-0 industries 29, 36, and 62 on the advice of an industry spokesman.

Fuel-fired kilns (cement, wood, and chemical) were distributed to I-0 industries 20, 27, and 36 in proportion to their capital expenditures for new machinery and equipment.

Other nonmetallic processing industrial furnaces and ovens, including kilns and lehrs, were allocated to I-0 industries 35 and 36 in proportion to their capital expenditures for new machinery and equipment.

The "all other" category includes specialized equipment for manufacturing jewelry, paint, drugs, and stone products, leather products, lamps, brooms, hats, cork products, pharmaceuticals, tiles, etc. Each class of equipment was matched to the industry producing it. Since no data were available on the value of each commodity, the value for the "all other" category was prorated over the capital expenditures for new equipment of these producing industries.

Contract work and miscellaneous receipts (3559098 and 3559099) were prorated in proportion to the allocations of special industry machinery (3559).

Codes						
I-O	CAP GOOD	PRODUCT	I M P	PRODUCER VALUE	PURCHASER VALUE	PRODUCT DESCRIPTIONS
490100	3056	3560	0	807.4	934.0	PUMPS, COMPRESSORS & PARTS
490100	3056	3561001	1	17.2	18.3	IMPORTED PUMPS & COMPRESSORS
490100	3053	3561513	0	12.6	14.6	SLUSH PUMPS, OIL WELL, OILFIELD
490100	3053	3561515	0	9.6	11.1	OTHER OIL-WELL OIL FIELD PUMPS
490100	3056	3563531	0	71.2	81.6	POWER PAINT SPRAYERS
490300	3056	3564000	0	23.7	27.3	TURBOBLOWERS, MULTISTAGE & POS. DISPL. BLOWERS & FILTERS
490300	3056	3564591	0	22.5	26.1	ELECTROSTATIC PRECIPITATION EQUIPMENT
490300	3056	35646	0	198.0	229.9	DUST COLLECTION EQUIPMENT FOR GAS CLEANING
490600	3056	3567001	0	32.8	36.0	INDUSTRIAL FURN. & OVENS NSK.
490600	3056	3567001	1	.9	.9	IMPORTED INDUSTRIAL FURN. & OVENS NSK.
490600	3056	3567099	0	6.6	6.6	MISC. RECEIPTS
490600	3056	35671	0	59.4	65.1	ELEC. INDUSTRIAL FURN. & OVENS FOR METAL PROCESSING
490600	3056	35672	0	87.5	96.0	FUEL INDUSTRIAL FURN & OVENS FOR METAL PROCESSING
490600	3056	356731	0	42.4	46.4	INDUCTION FURN. & HEATING EQUIPMENT
490600	3056	356733	0	11.0	12.0	DIELECTRIC HEATING EQUIPMENT
490600	3056	356735	0	47.3	51.8	OTHER ELECTRICAL HEATING EQUIPMENT
490700	3056	3569001	0	53.1	58.3	GENERAL IND. MACHINERY NEC, NSK
490700	3056	3569001	1	1.9	2.5	IMPORTED GENERAL IND. MACHINERY NEC, NSK
490700	3056	35691	0	161.8	175.9	PACKING AND PACKAGING MACHINERY NEC.
490700	3056	356991	0	502.8	546.7	ALL OTHER GEN IND. MACHINERY NEC EXCEPT FIRE EQUIPMENT
TOTALS				2169.7	2441.1	
MARGINS:						
TRANSPORT				34.2		
TRADE				237.2		
MARGIN TOTAL				271.4		

Distribution

Pumps and compressors.--Slush pumps (3561513) and other pumps for oil fields (3561515) were allocated to the crude petroleum and natural gas industry (I-O 8) based on description of the products.

Five percent of power paint spraying outfits and liquid power sprayers (3563531) was arbitrarily assigned to eating and drinking places (I-O 74) for pest control purposes. The remaining output was prorated to all industries according to their employment of painters.

The distribution of pumps, compressors, and parts (3560) was made as follows: an estimate of purchases by the agricultural industries (I-O 1, 2) was obtained from the USDA report *Farm Production Expenditures for 1971 by Economic Class*. The allocations to other industries were largely arbitrary, based on a review and judgmental adjustment of the percentage distribution of this product appearing in the 1963 capital flow table prepared by Jack Faucett Associates, the 1958 BLS capital flow table and broad customer categories reported in the U.S. Department of Commerce report, *U.S. Industrial Outlook 1975*.

Blowers and fans.--Dust collection equipment for gas cleaning (3564000), electrostatic precipitation equipment (3564591), and blower filter units, positive displacement blowers, turbo-blowers, and multistage blowers (35646) were distributed using data on the value of shipment by end-use from the Bureau of the Census *Current Industrial Report*, "Selected Industrial Air Pollution Control Equipment," August 1974. The "other end-use category" was allocated to other industries using information on expenditures by companies in 1972, as reported in a survey by McGraw-Hill Company reported in "Historical Pollution Control Expenditures and Related Data."

Industrial furnaces and ovens.--Electrical and fuel industrial furnaces and ovens for metal processing (35671 and 35672) and induction furnaces and heating equipment (356731) were prorated to industries based on their employment of metal heaters.

Dielectric heating equipment (356733) and other electrical heating equipment (356735) were distributed to likely using industries selected on the basis of product description in the *1972 Census of Manufactures* and the *Standard Industrial Classification Manual 1972*. This was their capital expenditures for new equipment. Miscellaneous receipts (3567099) were distributed in proportion to the other product 3567 codes.

General industrial machinery.--Packing and packaging machinery, n.e.c. (code 35691) was split into five types based on product detail for value of shipments reported in the *1972 Census of Manufactures* for SIC 356. Each type of machinery was then allocated to those industries purchasing containers for use with that machinery, i.e., cartons, tubes, bottles, etc., based on end-use data for containers as published in *Modern Packaging*, December 1972. Note that this product code does not include machinery for packaging food, beverages, or tobacco.

Other general industrial machinery, n.e.c., excluding fire equipment (356991) was split into several types based on product detail for value of shipments as reported in the *1972 Census of Manufactures*. Centrifugals, separators, and gas generating equipment were prorated to the manufacturing industries and the health, educational, and social services and nonprofit organizations industry (I-0 77) based on their employment of chemists. Pneumatic and hydraulic jacks were prorated to industries employing automobile mechanics. Small amounts of the "all other" category were arbitrarily allocated to trade, services, and utilities based on product descriptions for SIC 3569 appearing in the *Standard Industrial Classification Manual 1972*. The remainder--accounting for about 83 percent of the value of code 356991--was prorated to all manufacturing industries on the basis of their 1972 capital expenditures for new equipment.

Commodity 50 - Miscellaneous machinery

\$49.7 million

<u>Codes</u>						
I-O	CAP GOOD	PRODUCT	I M P	PRODUCER VALUE	PURCHASER VALUE	PRODUCT DESCRIPTIONS
500002	3058	3599431	0	38.6	49.7	CARNIVAL AND AMUSEMENT PARK EQUIPMENT
TOTALS				38.6	49.7	
MARGINS:						
TRANSPORT				6.9		
TRADE				4.2		
MARGIN TOTAL				11.1		

Distribution

Carnival and amusement park equipment (3599431) was distributed entirely to the amusements industry (I-0 76).

Codes						PRODUCT DESCRIPTIONS
I-O	CAP GOOD PRODUCT	I M P	PRODUCER VALUE	PURCHASER VALUE		
510101	3057 3573	0	-366.9	-405.6	UNDISTRIBUTED ELECTRONIC COMPUTING EQUIPMENT	
510101	3057 3573001	1	139.3	153.6	IMPORTED ELECTRONIC COMPUTERS & PERIPHERAL EQUIPMENT	
510101	3057+3573300	0	3365.5	3723.5	ELECTRONIC COMPUTERS	
510102	3057 3574	0	-113.0	-132.9	UNDISTRIBUTED CALCULATING & ACCOUNTING MACHINES	
510102	3057+3574001	1	109.1	118.3	IMPORTED ACCOUNTING MACHINES & CASH REGISTERS	
510102	3057+3574123	0	69.1	81.7	ADDING MACHINES & PRINTING CALCULATING MACHINES	
510102	3057 3574131	1	22.4	24.3	IMPORTED ADDING & CALCULATING MACHINES, EXCEPT ELECT.	
510102	3057 35742	0	184.7	218.2	ELECTRONIC CALCULATING MACHINES	
510102	3057 35742	1	100.4	109.1	IMPORTED ELECTRONIC CALCULATING MACHINES	
510102	3057 3574312	0	149.1	175.9	ACCOUNTING & BOOKKEEPING MACH. & CASH REGISTERS, REBUILT	
510102	3057 3574399	0	53.3	62.9	COIN & CURRENCY HANDLING AND OTHER MACHINES	
510200	3057 3572	0	-160.3	-203.3	UNDISTRIBUTED TYPEWRITERS	
510200	3057+3572109	0	288.6	367.4	TYPEWRITERS	
510200	3057 35723	1	4.9	5.3	IMPORTED STANDARD PORTABLE TYPEWRITERS	
510200	3057 35726	1	53.7	58.2	OTHER IMPORTED TYPEWRITERS	
510300	3057 3576	0	2.6	3.0	UNDISTRIBUTED SCALES & BALANCES	
510300	3057 3576001	1	2.0	2.2	IMPORTED WEIGHING SCALES	
510300	3057 3576014	0	14.8	17.0	MOTOR TRUCK AND RAILROAD TRACK SCALES	
510300	3057 3576022	0	61.1	70.1	INDUSTRIAL SCALES	
510300	3057 3576032	0	35.9	41.1	RETAIL AND COMMERCIAL SCALES	
510300	3057 3576051	0	1.0	1.1	MAILING AND PARCEL POST SCALES	
510300	3057 3576082	0	2.8	3.2	ACCESSORIES AND ATTACHMENTS	
510400	3057 3579	0	-142.3	-180.6	UNDISTRIBUTED OFFICE MACHINES	
510400	3057 35793	0	74.8	95.2	DUPLICATING MACHINES	
510400	3057 35793	1	7.6	8.2	IMPORTED DUPLICATING MACHINES	
510400	3057 35795	0	125.1	159.3	MAILING, LETTER HANDLING, AND ADDRESSING MACHINES	
510400	3057 35795	1	27.6	29.9	IMPORTED MAILING, LETTER HANDLING, AND ADDRESSING MACH.	
510400	3057 35796	0	199.3	253.6	ALL OTHER OFFICE MACHINES	
510400	3057 35796	1	11.0	11.9	IMPORTED ALL OTHER OFFICE MACHINES	
TOTALS			4323.2	4871.8		
MARGINS:						
TRANSPORT			37.1			
TRADE			511.5			
MARGIN TOTAL			548.6			

Distribution

Electronic computing equipment.--Electronic computers and peripheral equipment (3573300) were allocated together on the assumption that the requirements for peripheral equipment are proportional to computers. Computers are treated on a user basis, since it is not possible to differentiate their acquisition by purchase or by lease. Since no data are available on installation of new electronic computing equipment by using industry, estimates of the installed value of general purpose computers at the end of 1972 were used as a proxy to distribute new computers. These data--at a roughly two-digit level of detail--are from an unpublished study by the International Data Corporation. Modifications to the data were made to exclude the Federal and State and local government shares of installed computers. The estimate for education was also modified to exclude public education's share, estimated in proportion to the enrollment in public and in private universities. A further adjustment was needed to account for computers leased to Federal and State and local governments. These leased computers must be included in the allocation to the business services industry (I-0 73). This was done by making a specific estimate for the Federal Government portion based on data in the GSA report "ADP Inventory of General Use Computers and Peripheral Equipment." Payments for leased equipment were converted to the value of equipment using a rule-of-thumb conversion factor of four times the annual rental charge, cited in *Fortune*, November 1973.

This figure was converted to an annual basis using an estimated equipment life of five years. The estimate for State and local government was made by factoring up the allocation of State and local government purchases of electronic computing equipment in the 1972 I-0 table by the ratio of leased to purchased equipment that was derived from the above calculation of the computers leased by the Federal Government and Federal Government purchases of computers in the I-0 table. The two estimates for governmental leasing of computers were deducted from the total value to be allocated by the industry prorate base and were added to the resulting estimate for business services (I-0 73).

The further breakdown of the allocation from a two-digit SIC to the I-0 level of detail was based on employment by industry of computer and peripheral equipment operators, systems analysts, and computer specialists. The allocation of the computer manufacturing industry (I-0 51) was modified to avoid an overallocation due to its employment of the specialized skills.

Other office machines.--Adding machines, printing calculators, and calculating machines (3574123), and electronic calculating machines (35742) were prorated to industries based on their employment of bank tellers, billing clerks, bookkeepers, calculating machine operators, payroll clerks, and statistical clerks.

Accounting and bookkeeping machines and cash registers (3574312) were split, using information from industry sources, between accounting and bookkeeping machines, which were prorated to industries based on the employment of bookkeeping and billing machine operators, and cash registers which were prorated to industries based on the employment of cashiers.

Coin and currency handling machines and other calculating and accounting machines (3574399) were prorated to industries based on the employment of bookkeeping, billing, and calculating machine operators.

Typewriters (3572109) were prorated to industries on the number of receptionists, secretaries, stenographers, and typists.

Motor truck and railroad truck scales (3576014) and industrial scales (3576022) were prorated to a two-digit SIC level based on data obtained from a major manufacturer. A further prorate to the two-digit I-0 level was made over the expenditures of new capital equipment by industry.

Retail and commercial scales (3576032) were distributed to industry 69 on the basis of description. Mailing and parcel post scales (code 3576051) were prorated to industries on the basis of expenditures for fourth class postage.

Accessories and attachments (3576082) were distributed in proportion to the distribution of the related codes.

Duplicating machines using spirit, offset, stencil, gelatin, ribbon, and ink processes (code 35793) were prorated to industries based on the number of duplicating machine operators.

Mailing, letterhandling, and addressing machines (35795) were prorated to industries based on the number of mail handlers not employed in post offices.

All other office machines, n.e.c. (code 35796) included various specific products requiring separate distributions. Product detail was based on data of value of shipments in table 6A of the 1972 *Census of Manufactures* and allocated as follows:

1. Check handling machines were distributed to finance and insurance (I-0 70) on the basis of product description.
2. Time recording and time stamp machines were prorated to industries on the number of payroll and timekeeping clerks.
3. Forms handling equipment, including bursters, decollators, imprinters, and autographic registers, were prorated to industries based on the number of computer and peripheral equipment operators.

"All other" office machines in product code 35796 were prorated to industries based on the number of bookkeepers, bookkeeping and billing machine operators, calculating machine operators, office machine operators, n.e.c., and secretaries.

Commodity 52 - Service industry machines

\$2,482.1 million

I-O	CAP GOOD	PRODUCT	I M	PRODUCER VALUE	PURCHASER VALUE	PRODUCT DESCRIPTIONS
520100	3058	3581001	0	13.7	16.6	AUTO. MERCHANDISING MACHINERY NSK
520100	3058	35811	0	218.3	264.5	AUTO. MERCHANDISING MACHINES
520200	3058	3582001	0	8.4	10.9	COMM. LAUNDRY EQUIP, NSK
520200	3058	3582001	1	7.1	8.1	IMPORTED COMM. LAUNDRY EQUIP, NSK
520200	3058	3582020	0	86.8	111.3	COMM. LAUNDRY EQUIPMENT & PRESSES
520200	3058	3582030	0	34.5	44.1	DRYCLEAN EQUIPMENT & PRESSES
520200	3058	3582099	0	.6	.6	MISC. RECEIPTS
520300	3058	358512	0	37.2	41.1	UNIT COOLERS
520300	3058	3585149	0	147.6	163.1	OTHER HEAT TRANSFER EQUIPMENT
520300	3058	358516	0	76.6	84.7	ICEMAKING MACHINES
520300	3058	358531	0	417.3	461.4	OTHER COMMERCIAL REFRIG EQUIPMENT
520300	3058	3585450	0	51.6	57.1	COMPRESSORS & NON-AMMONIA CONDENSORS
520300	3058	358546	0	10.9	12.0	AMMONIA CONDENSORS
520300	3058	358563	0	236.2	261.0	ROOM AIR CONDITIONERS
520300	3058	358563	1	4.2	4.4	IMPORTED ROOM AIR CONDITIONERS
520300	3058	358572	0	10.6	11.7	SODA AND BEER DISPENSING EQUIPMENT
520300	3058	3585796	0	64.2	71.0	OTHER REFRIGERATION MACHINERY
520400	3058	3586	0	166.0	218.8	MEASURING AND DISPENSING PUMPS
520500	3058	3589001	0	-54.5	-71.6	SERVICE IND. MACHINERY, NSK
520500	3058	3589099	0	2.6	2.6	MISC. RECEIPTS
520500	3058	358910	0	185.6	244.7	COMMERCIAL COOKING EQUIPMENT
520500	3058	358920	0	289.2	381.2	SERVICE INDUSTRY MACHINES
520500	3058	3589226	0	6.0	7.9	FARM, HOUSEHOLD, AND COMMERCIAL WATER SOFTENERS
520500	3058	358930	0	56.9	74.9	COMMERCIAL AND INDUSTRIAL VACUUM CLEANERS

TOTALS 2077.6 2482.1

MARGINS:
TRANSPORT
TRADE

21.2
383.3

MARGIN TOTAL

404.5

Distribution

Automatic merchandising machines (35811 and 3581001) were distributed to trade (I-0 69) as the sole user.

Commercial laundry equipment (3582020), drycleaning and presses (3582030), commercial laundry equipment, n.s.k. (code 3582001), and installation receipts (3582099) were distributed to the personal services component of I-O 72 as the sole user.

Refrigeration and heating equipment.--Product codes 3585450, 3585796, and 3585149 were prorated to industries according to the number of air conditioning, heating, and refrigeration mechanics and repairmen they employ. The weights for construction (I-O 11, 12), trade (I-O 69), and repair services (I-O 72) were modified judgmentally to exclude repairmen servicing the equipment of others.

Unit coolers (358512) were allocated to the food processing industry (I-O 14) and trade (I-O 69) on the advice of industry spokesman, using the number of air conditioning, heating, and refrigeration mechanics and repairmen employed in each industry to make the split.

Icemaking machines (358516) were distributed to industries 14, 69, 72, 74, 76, and 77, based on the advice of a spokesman for a leading manufacturer. The share for health care institutions in I-O 77 did not include any publicly-owned facilities, since these are outside the scope of the CFT. The data used were from the American Hospital Association publication *Hospital Statistics, 1974*, relating to average daily census of short-and-long-term occupancy in general hospitals, psychiatric hospitals, and related health care institutions.

Room air-conditioners (358563) were prorated to all industries according to their employment of professional, technical, and kindred workers, and administrators, sales workers, and clerical and kindred workers.

Other commercial refrigeration equipment (358531) was broken down by product in proportion to the detail on value of shipments in table 6A of the *1972 Census of Manufactures*. Most products were assigned to a single using industry based on the description of the product. Products used in food retailing and in eating and drinking places were split between I-O 69 and I-O 74 in proportion to their expenditures for new machinery and equipment. The "all other" category was split arbitrarily between food processing (I-O 14), trade (I-O 69), personal services (I-O 72), and eating and drinking places (I-O 74).

Soda fountain and beer dispensing equipment (358572) was allocated on the basis of usage to eating and drinking places (I-O 74).

Measuring and dispensing pumps (3586) include gasoline dispensing pumps, lubricating oil outfits and pumps, grease pumps, and other measuring and dispensing pumps were available as product detail from value of shipments data in table 6A of the *1972 Census of Manufactures*. Gasoline pumps were allocated to trade (I-O 69); although small amounts were probably purchased by other industries, no data were available to make such allocations. Lubricating oil outfits and pumps were first split into three parts proportional to data on sales of automotive, aviation, and industrial types of oil in Bureau of the Census *Current Industrial Reports* MA29C for 1972, table 1. The automotive portion was allocated to trade (I-O 69); the aviation portion was allocated to air transportation (I-O 65); and, the industrial portion was allocated to all industries based on their employment of machinists and heavy equipment mechanics. Grease pumps and guns were allocated in the same way, except that the automotive portion was assigned to auto repair services in I-O 75.

Commercial cooking equipment (35891) was split between private hospitals (part of I-O 77) and eating and drinking places (I-O 74). This split was in proportion to their employment of selected categories of workers; i.e., bakers, cooks, food service workers, dishwashers, busboys, food and counter workers, and waiters.

Service industry machines (35892) were split into three groups by using the 1972 *Census of Manufactures*, table 6A, for SIC 358: industrial water softeners, industrial dishwashers, and "other." Industrial water softeners were prorated to industries on their relative use of treated water as reported in the 1972 *Census of Manufactures*, Subject Series - SF4-24, *Water Use in Manufacturing*, table 1A.

Commercial dishwashers were split between private hospitals (I-O 77) and eating and drinking places (I-O 74) in the same way as commercial cooking equipment (3589100) above. The "other" part of product 3589100 was prorated to all industries over their employment of janitors and sextons. Commercial and industrial vacuum cleaners (35893) were also prorated to all industries over their employment of janitors and sextons.

Farm household and commercial water softeners (3589226) were allocated to the water softeners service industry in I-O 73.

Miscellaneous receipts (3589099) are for the installation of sewage purification equipment and industrial cooking equipment. The former was allocated to private water treatment plants in I-O 68; the latter was allocated to eating and drinking establishments (I-O 74). The split is made in proportion to the value of the shipments reported in the 1972 *Census of Manufactures*, table 6A.

NOTE: Mechanical dehumidifiers (358522) and sewage treatment equipment (3589281) were both in PDE in 1967. In the 1972 I-O table, mechanical dehumidifiers went to PCE and sewage treatment equipment to construction; hence, they are no longer in the CFT distribution.

Codes						
I-O	CAP GOOD	PRODUCT	I M P	PRODUCER VALUE	PURCHASER VALUE	PRODUCT DESCRIPTIONS
530100	3061	382501	0	659.4	681.2	SUM OF UNDISTRIBUTED INSTRUMENTS
530100	3061	382538	0	19.5	20.1	OTHER ELECTRICAL MEASURING INSTRUMENTS
530200	3061	3612000	0	9.9	10.6	TRANSFORMERS, NSK
530200	3061	36122	0	913.1	975.6	POWER & DISTRIBUTION TRANSFORMERS
530200	3061	36125	0	21.8	23.2	SPECIALTY TRANSFORMERS
530200	3061	361272	0	34.5	36.9	POWER REGULATORS, BOOSTERS, REACTORS
530300	3061	3613000	0	116.6	127.8	SWITCHGEAR AND SWITCHBOARD APPARATUS, NSK
530300	3061	3613101	0	372.5	408.4	SWITCHGEAR EXCLUDING RELAYS, DUCTS NEC
530300	3061	36132	0	170.3	186.7	POWER CIRCUIT BREAKERS
530400	3061	3621000	0	14.7	15.3	MOTORS & GENERATORS, NSK
530400	3061	3621000	1	2.4	2.5	IMPORTED MOTORS & GENERATORS, NSK
530400	3061	36211	0	25.0	26.0	FRACTIONAL HORSEPOWER MOTORS
530400	3061	36212	0	22.8	23.2	INTEGRAL HP MOTOR EXCEPT FOR LAND TRANSP. EQUIPMENT
530400	3061	36214	0	183.7	191.6	PRIME MOVER GENERATOR SETS
530400	3061	36215	0	117.3	122.3	MOTOR-GENERATOR SETS
530500	3061	362203	0	44.7	48.9	SPECIFIC APPARATUS CONTROLS EXCLUDING MILLS & CRANES
530500	3061	3622049	0	7.4	8.0	METAL MILL, CRANE, AND HOIST CONTROLS
530500	3061	+3622050	0	89.8	97.8	RHEOSTATS, RESISTORS, SPEED CONTROLS & GEN. IND. DEVICES
530600	3061	+3623150	0	259.7	328.6	ELECTRIC WELDING APPARATUS
530800	3061	3629000	0	15.1	16.1	INDUSTRIAL ELECTRICAL APPARATUS, NSK
530800	3061	36291	0	98.7	105.1	CAPACITORS FOR INDUSTRIAL USE
530800	3061	+3629250	0	110.7	117.7	SEMICONDUCTORS, RECTIFIERS & IND. ELECTRICAL EQUIP. NEC.
TOTALS				3309.6	3573.6	
MARGINS:						
TRANSPORT				47.1		
TRADE				216.9		
MARGIN TOTAL				264.0		

Distribution

Electrical integrating instruments and electrical testing equipment (382501) and other electrical measuring instruments (382538) were prorated over the number of electrical and electronic engineering technicians employed in each industry.

Power and distribution transformers (36122), power regulators, boosters, and reactors (361272), and power circuit breakers (36132) were allocated to transportation (I-0 65) and electric utilities (I-0 68), and to selected manufacturing industries that reported heavy electricity consumption. A rough percentage split among utilities, transportation, and manufacturing was estimated by a government analyst and confirmed by an industry spokesman. The allocation to the manufacturing industries was distributed in proportion to electric energy consumed.

Specialty transformers (36125) were prorated to industries that are heavy users of electricity on the basis of electricity consumed.

Switchgear, excluding relays and including ducts and related equipment (3613101), was prorated to mining and manufacturing industries based on the consumption of electricity.

Fractional horsepower motors (36211) were prorated to industries based on the number of machinists, drillpress operators, grinding machine operators, lath and milling machine operators, and precision machinery operators.

Integral horsepower motors (36212), motor generator sets (36215), and general industrial controls (3622050) were prorated to industries based on electricity consumed.

Some prime mover generator sets (36214) were allocated to I-0 11, 66, and 73 based on estimates from two major producers. The remainder of product code 36214 was prorated to industries on the basis of electricity consumed.

Specific application controllers (362203) include marine controls and accessories, machine tool controls, and other specific special purpose A.C. and D.C. controllers. The amount of each of these product groups within product code 262203 was estimated on the basis of value of shipments data from table 6A in the *1972 Census of Manufactures*. The marine controls and accessories were allocated to I-0 65 on the basis of product description. Machine tool controls were prorated to industries on the relative stocks of metal cutting machines as reported in an October 1973 issue of *The 11th American Machinist Inventory of Metalworking Equipment*. Other specific special purpose A.C. and D.C. controllers were prorated to industries on the basis of electric energy consumed.

Metal mill and crane and hoist controls (3622049) were first split between metal mills and cranes and hoists, based on value of shipments data from table 6A of the *1972 Census of Manufactures*. Metal mills controls were prorated between I-0 37 and 38 on the basis of new capital expenditures. From an estimate developed from data on materials handling equipment as reported in the *1972 Census of Wholesale Trade*, "Sales by Class of Customers," some crane and hoist controls were allocated to trade (I-0 69). The remainder was prorated to industries in the same way as cranes and hoists (I-0 46.0300) was distributed in the current account I-0 table.

An allocation of electric welding equipment and accessories (3623150) was made to agriculture on data reported in a USDA report, *Farm Production Expenditures, 1971 and 1972*. The 1971 publication reported purchases of arc welding equipment. In 1972, data were reported at a broader level--for power farm shop equipment. The 1971 and 1972 rate of change in this broader product line was used to estimate arc welding purchases for 1972. The initial allocation to agriculture was prorated across total capital investment in industries 1 and 2. The remainder of code 3623150 was prorated across the employment of welders and flame cutters in the manufacturing and transportation industries.

Based on an estimate from an industry spokesman, an allocation of capacitors for industrial use (36291) was made to utilities (I-0 68). The remainder of code 36291, as well as other electrical industrial equipment (3629250), was prorated to industries according to their consumption of electricity.

Commodity 54 - Household appliances

\$1,214.0 million

Codes						
I-O	CAP GOOD	PRODUCT	I M P	PRODUCER VALUE	PURCHASER VALUE	PRODUCT DESCRIPTIONS
540100	4040	3631	0	-3.1	-3.2	UNDISTRIBUTED RANGES & STOVES
540100	4040	363110	0	178.5	214.7	ELECTRIC RANGES AND OVENS
540100	4040	363110	1	9.6	10.4	IMPORTED ELECTRIC RANGES AND OVENS
540100	999	363120	0	78.7	94.6	GAS COOKING STOVES AND RANGES
540100	4040	363126	0	24.1	28.9	OTHER GAS COOKING STOVES & RANGES
540200	4040	3632	0	-4.4	-4.6	UNDISTRIBUTED HOUSEHOLD REFRIGERATORS
540200	999	3632100	0	382.5	467.7	HOUSEHOLD REFRIGERATORS
540200	4040	3632100	1	34.0	38.7	IMPORTED HOUSEHOLD REFRIGERATORS
540300	3063	3633	0	-4.6	-4.7	HOUSEHOLD LAUNDRY EQUIPMENT
540300	3063	363332	0	24.4	29.2	COIN OPERATED LAUNDRY EQUIPMENT
540300	3063	363332	1	3.0	3.2	IMPORTED COIN OPERATED LAUNDRY EQUIPMENT
540400	3063	3634	0	-29.6	-30.4	UNDISTRIBUTED ELECTRIC HOUSEWARES
540400	999	363412	0	2.4	2.9	WINDOW FANS
540400	999	363414	0	2.7	3.3	DESK & ROLLABOUT FANS
540400	3063	363416	0	.6	.7	KITCHEN VENTILLATING & EXHAUST FANS
540400	999	3634310	0	22.8	27.5	ELECTRIC COOKING & HEATING APPLIANCES
540400	999	3634340	0	2.0	2.4	PORTABLE AIR SPACE HEATERS
540400	3063	3634361	0	.4	.5	TRAVEL AND OTHER IRONS
540400	3063	3634392	0	.8	.9	AIR PURIFIERS
540400	3063	3634393	0	10.0	12.0	ELECTRIC CAN OPENERS
540400	3063	3634393	1	1.9	2.1	IMPORTED ELECTRIC CAN OPENERS
540400	3063	3634396	0	1.5	1.8	PORTABLE HUMIDIFIERS
540400	3063	3634399	0	38.5	46.4	OTHER ELECTRIC APPLIANCES
540500	3063	3635	0	-1.4	-1.4	UNDISTRIBUTED
540500	3063	3635020	0	17.6	20.7	HOUSEHOLD VACUUM CLEANERS
540500	3063	3635051	0	1.6	1.8	ATTACHMENTS & CLEANING TOOLS
540600	3063	3636	0	-.3	-.3	UNDISTRIBUTED
540600	3063	3636071	0	59.3	70.4	INDUSTRIAL SEWING MACHINES
540600	3063	3636071	1	28.1	30.4	IMPORTED INDUSTRIAL SEWING MACHINES
540600	3063	3636081	0	10.4	12.4	SEWING MACHINE PARTS & ATTACHMENTS
540700	4040	3639	0	-2.6	-2.6	UNDISTRIBUTED HOUSEHOLD APPLIANCES
540700	3063	3639255	0	1.1	1.4	NONELECTRIC INSTANTANEOUS WATER HEATERS
540700	4040	3639411	0	114.7	136.2	DISHWASHING MACHINES
TOTALS				1005.2	1214.0	
MARGINS:						
TRANSPORT				39.1		
TRADE				169.7		
MARGIN TOTAL				208.8		

Distribution

Electric ranges and ovens (363110) and other gas cooking stoves and ranges (363126) are landlord durable equipment and allocated to real estate (I-0 71). The landlord durable equipment part of standard free standing gas stoves (363120) was allocated to I-0 71; the remainder was allocated to eating and drinking establishments (I-0 74).

Household refrigerators (3632100).--Landlord durable equipment was allocated to I-0 71; the remainder was distributed arbitrarily between the other major consumers; hotels, motels and personal services (I-0 72) and eating and drinking places (I-0 74).

Coin-operated laundry equipment (363332) was allocated to hotels, motels, and personal services in I-0 72 as the sole user.

Household window fans (363412) and *deck and rollabout fans* (363414).--Landlord durable equipment was allocated to I-O 71. The remainder was distributed on the basis of employment of 16 selected occupations, reflecting an industry's relative office size and probable requirements for office fans. Kitchen and ventilating fans (363416) were allocated to eating and drinking establishments (I-O 74).

Electric heating and cooking appliances (3634310).--Landlord durable equipment was distributed to I-O 71; the remainder was allocated to eating and drinking establishments (I-O 74).

Portable air space heaters (3634340).--Landlord durable equipment was allocated to I-O 71; the remainder was allocated to hotels, motels, and personal services (I-O 72).

Travel irons, air purifiers, and portable humidifiers (3634361, 3634392, and 3634396) were allocated to hotels and motels (I-O 72).

Electric can openers (3634393) were allocated to eating and drinking places (I-O 74).

Other electric appliances (3634399) included items such as vibrators, curling irons, knife sharpeners, etc. An estimate based on product detail for value of shipment in table 6A of the *1972 Census of Manufactures*, was allocated to eating and drinking places (I-O 74). The remainder was allocated to hotels, motels, and personal services (I-O 72).

Household vacuum cleaners (3635020) and vacuum cleaner attachments and cleaning tools (3635051) were prorated to industries based on their employment of janitors.

Industrial sewing machines (3636071) and industrial sewing machine parts and attachments (3636081) were prorated to industries on the basis of number of sewers and stitchers, dressmakers and seamstresses, and tailors they employ.

Nonelectric instantaneous water heaters (3639255) were distributed to I-O 71, 72, 74, and 75 based on an estimate provided by a major producer.

Household dishwashing machines (3639411) were allocated to I-O 71 as landlord durable equipment.

Commodity 55 - Electric lighting and wiring equipment\$94.6 million

Codes				I P	PRODUCER VALUE	PURCHASER VALUE	PRODUCT DESCRIPTIONS
I-O	CAP GOOD	PRODUCT	M				
550200	3063	3645001	0		6.4	7.4	RESIDENTIAL LIGHTING FIXTURES, NSK
550200	3063	3645700	0		1.0	1.2	RESIDENTIAL PORTABLE LAMPS, PARTS & ACCESSORIES
550200	3063	3645724	0		4.8	5.5	PORTABLE RESIDENTIAL INCANDESCENT LAMPS WITH SHADES
550200	3063	3645735	0		19.9	23.3	ALL OTHER PORTABLE RESIDENTIAL LAMPS
550200	3063	3646219	0		23.3	26.5	COMMERCIAL AND INSTITUTIONAL INCANDESCENT FIXTURES
550200	3063	3646318	0		3.3	3.7	INDUSTRIAL LIGHTING FIXTURES
550200	3063	3648543	0		2.1	2.4	SPOTLIGHTS
550200	3063	3648900	0		.4	.4	OTHER LIGHTING EQUIPMENT, NSK
550200	3063	3648975	0		2.0	2.2	OTHER FLUORESCENT LIGHTING EQUIPMENT
550200	3063	3648991	0		1.1	1.2	ELECTROTHERAPEUTIC LAMP FIXTURES
550300	3063	3643069	0		1.8	2.1	CHOKE COILS, ETC.
550300	3063	3643074	0		16.1	18.7	LIGHTNING ARRESTORS
TOTALS					82.2	94.6	
MARGINS:							
TRANSPORT					.8		
TRADE					11.6		
MARGIN TOTAL					12.4		

Distribution

Portable incandescent residential lamps with shades (3645724), portable incandescent fixtures, parts, and accessories (3645700), and other portable lamps (3645735) were allocated principally to hotels, motels, and personal services (I-0 72) with only token amounts going to I-0 71, 69, and 77. Residential lighting fixtures, n.s.k. (3645001) were allocated as above but only to I-0 69, 72, and 77.

Electro-therapeutic lamp fixtures (3648991) were allocated to medical services in I-0 77 on the basis of product description.

Commercial incandescent lighting, including portable and display lighting (3646219), was allocated to trade (I-0 69) as the sole user.

Other industrial lighting, including portable (3646318) was prorated to industries according to their employment of nine occupations, including mechanics, repairmen, machinists, and other industrial workers.

Spotlights (3648543) were allocated to the amusement industry (I-0 76) as the sole user.

Other fluorescent lighting equipment (3648975) was prorated to industries based on employment of 11 occupations, including architects, engineers, draftsmen, and designers.

Other lighting equipment, parts, and accessories, n.s.k. (3648900) were distributed to industries in proportion to the allocations of product codes 3648543, 3648975, and 3648991.

Choke coils (3643069) were split between utilities (I-0 68) and transportation (I-0 65) on advice from an industry spokesman.

Lighting arrestors (3643074) were allocated partially to I-0 68 on information from an industry spokesman. The remainder was prorated to industries on the basis of electricity generated.

Codes						PRODUCT DESCRIPTIONS
I-O	CAP GOOD	PRODUCT	I M P	PRODUCER VALUE	PURCHASER VALUE	
560100	3062	3651001	1	66.6	74.8	IMPORTED OTHER COMMERCIAL SOUND EQUIPMENT
560100	999	36512	0	59.4	73.8	HOUSEHOLD TELEVISION RECEIVERS
560100	999	36512	1	13.9	14.8	IMPORTED HOUSEHOLD TELEVISION RECEIVERS
560100	3062	3651400	0	.7	.9	RECORDERS, AMPLIFIERS & AUDIO EQUIPMENT, NSK
560100	3062	3651402	0	45.1	56.0	COIN OPERATED ELECTRONIC PHONOGRAPHS
560100	3062	3651431	0	.9	1.1	HOME-TYPE RECORDERS
560100	3062	3651450	0	20.2	25.0	LOUDSPEAKERS, MICROPHONES, TUNERS, ALL TYPES
560100	3062	3651590	0	13.3	16.5	OTHER COMMERCIAL SOUND EQUIPMENT EXCLUDING BROADCAST
560300	3062	3661001	0	15.1	15.3	TELEPHONE AND TELEGRAPH APPARATUS, NSK
560300	3062	3661099	0	44.4	44.4	MISC. RECEIPTS
560300	3062	36611	0	1527.5	1561.3	SWITCHBOARDS AND TELEPHONE SWITCHING EQUIPMENT
560300	3062	3661200	0	7.1	7.2	OTHER TELEPHONE AND TELEGRAPH APPARATUS, NSK
560300	3062	3661214	0	473.0	483.4	TELEPHONE CARRIER AND REPEATER EQUIPMENT
560300	3062	3661234	0	337.7	345.2	TELEPHONE INSTRUMENT SETS
560300	3062	3661261	0	161.2	164.7	OTHER TELEPHONE APPARATUS AND COMPONENTS
560300	3062	3661273	0	84.0	85.9	TELEPRINTER UNITS
560300	3062	3661276	0	97.7	99.8	OTHER TELEGRAPH APPARATUS EQUIPMENT & COMPONENTS
560400	3062	3662	0	1389.1	1420.4	RADIO AND TV COMM. EQUIPMENT
560400	3062	3662001	1	17.7	18.6	IMPORTED ELECTRONIC SYSTEMS & EQUIPMENT
560400	3062	3662099	0	37.0	37.0	MISC. RECEIPTS
TOTALS				4411.6	4546.1	
MARGINS:						
TRANSPORT				21.4		
TRADE				113.1		
MARGIN TOTAL				134.5		

Distribution

Some household television sets (36512) were allocated to the real estate and rental industry (I-0 71) as landlord durable equipment. Judgmental estimates were made for TV rental sets allocated to business services (I-0 73) and for sets acquired by private education (I-0 77). The remainder was prorated to industries 72, 74, and 77 using a method that involved the number of guest rooms in hotels and motels, beds in private hospitals and related institutions, and the number of eating and drinking establishments.

Coin-operated electronic phonographs (3651402) were allocated to the amusement industry (I-0 76) on the basis of product description.

Records for home usage and tapes and discs (3651431), were allocated arbitrarily to I-0 77 for use by educational establishments.

Microphones (3641450) were distributed equally to major consumers, radio and TV (I-0 67), business services (I-0 73), and amusements (I-0 76).

Other commercial sound equipment (3651590).--An estimated 40 percent was allocated to business services (I-0 73) for use in FM multiple subscriber services and music distribution systems. The remainder was split equally between the other major consuming industries: amusements (I-0 76) and private schools and hospitals (I-0 77).

Telephone switching and switchboard apparatus (36611) was distributed mainly to the communication industry (I-0 66). Token amounts were allocated to the real estate industry (I-0 71), hotels and motels (I-0 72), and private schools and hospitals (I-0 77) based on the advice of a government analyst.

Telephone carrier and repeater equipment (3661214) and other telephone apparatus and components (3661251), teleprinter units (3661273), and other telegraph apparatus and equipment (3771276) were distributed to communications (I-0 66) on the basis of product description.

Most telephone instrument sets (3661234) were distributed to communications (I-0 66). Token amounts were distributed to I-0 71, 72, and 77.

Miscellaneous receipts (3661099) were allocated entirely to communications (I-0 66).

Telephone and telegraph apparatus, n.s.k. (code 3661001) were prorated over the distribution of the codes under SIC 3661 and 3662.

Radio and television communication equipment (3662) was broken into a number of products, based on detailed information on value of shipments in table 6A of the *1972 Census of Manufactures*. Airborne and marine mobile radio systems were distributed to transportation (I-0 65) on the basis of product description. Electronic checkout, monitoring, evaluation, and other electronic support equipment for communication, was prorated to industries based on their employment of electrical and electronic engineering technicians.

Radio and TV broadcast equipment was allocated to the radio and TV industry (I-0 67) on the basis of product description.

Intercommunication equipment (except telephone and telegraph equipment) and electric alarm and signal systems were prorated to industries based on their employment of professional and kindred workers.

Ultrasonic cleaners were split equally between producers of scientific and technical instruments (I-0 62) and repair services (I-0 72), and ultrasonic welders, solders, and drills were allocated to producers of electronic components (I-0 57) on the advice of industry analysts. Other ultrasonic equipment was prorated to industries on the basis of their employment of electrical and electronic engineering technicians. Telemetering systems and equipment were prorated to industries on the basis of their employment of radio operators. Amplifiers, except audio, were prorated to industries on the basis of their employment of electrical and electronic engineering technicians. Electronic trainers and simulators were distributed to transportation (I-0 65) on the basis of description and the advice of a government analyst. Electronic teaching machines and teaching aids were distributed to private education (I-0 77) on the basis of the product description. Other electronic systems, equipment, and sub-assemblers, n.e.c. were prorated to industries on the basis of their employment of electrical and electronic engineering technicians.

Geophysical electronic equipment, particle accelerators, and subassemblers plus scientific electronic equipment, n.e.c. were distributed to higher education and nonprofit research organizations in I-0 77 on the basis of product description.

Microwave and mobile telephone communications equipment was distributed to communications (I-0 66) on the basis of product description.

Miscellaneous receipts (3662099) were prorated in proportion to the distribution of other products in the group.

Commodity 57 - Electronic components and accessories\$14.8 million

Codes						
I-O	CAP GOOD	PRODUCT	I M P	PRODUCER VALUE	PURCHASER VALUE	PRODUCT DESCRIPTIONS
570300	3062	3679001	0	1.3	1.3	ELECTRONIC COMPONENTS NEC, NSK
570300	3062	3679005	0	13.1	13.5	MAGNETIC RECORDING MEDIA
TOTALS				14.4	14.8	
MARGINS:						
TRANSPORT				.1		
TRADE				.3		
MARGIN TOTAL				.4		

Distribution

Magnetic recording media (3679005) was first split into finer product detail by using information on value of shipments from the *1972 Current Industrial Reports*, MA-36N. Audio tape was divided evenly between radio and TV broadcasting (I-0 67) and the recording industry (I-0 73) after a token amount was given to education (I-0 77). The computer tape portion was distributed in the same manner as the PDE for computers and peripheral equipment (see product code 35733 in I-0 commodity 51 above). The instrumentation and video tape portion was sent mostly to TV broadcasting (I-0 67), with a small amount assigned arbitrarily to business services (I-0 73).

Electronic components, n.e.c., n.s.k. (3679001) was prorated over the number of electronic and electrical engineering technicians.

Commodity 58 - Miscellaneous electrical machinery
equipment and supplies\$588.7 million

Codes						
I-O	CAP GOOD	PRODUCT	I M P	PRODUCER VALUE	PURCHASER VALUE	PRODUCT DESCRIPTIONS
580100	3063	3691211	0	59.8	67.6	INDUSTRIAL TRUCK MOTIVE POWER STORAGE BATTERIES
580100	3063	3691251	0	30.4	34.2	COMMUNICATION STORAGE BATTERIES
580100	3063	3691261	0	5.7	6.4	RAILWAY DIESEL STARTING BATTERIES
580300	3063	3693030	0	179.8	271.9	X-RAY EQUIPMENT AND ACCESSORIES
580300	3063	3693090	0	138.2	208.6	MEDICAL ELECTRONIC EQUIPMENT EXCEPT X-RAY
TOTALS				413.9	588.7	
MARGINS:						
TRANSPORT				14.1		
TRADE				160.7		
MARGIN TOTAL				174.8		

Distribution

Industrial truck motive power storage batteries (3691211) were distributed proportionately to allocations of power floor equipment (3537010). See I-0 commodity 46 above. Upon the advice of an industry spokesman, communication storage batteries (3691251) were sent 90 percent to communications (I-0 66) and 10 percent to transportation (I-0 65). Railway diesel starting batteries (3691261) were sent entirely to transportation (I-0 65), based on their description.

X-ray equipment and accessories (36930300) were first split into medical and industrial uses, based on product detail on value of shipments in the *1972 Current Industrial Reports*, MA-38B. The medical portion was sent to I-0 77 and the industrial equipment and accessories were distributed to industries in proportion to their employment of checkers, examiners, and inspectors.

Medical electrical equipment, excluding X-ray devices (3693090), was sent entirely to I-0 77 on the basis of product description.

Commodity 59 - Motor vehicles and equipment

\$20,214.6 million

Codes

I-O	CAP GOOD	PRODUCT	I M P	PRODUCER VALUE	PURCHASER VALUE	PRODUCT DESCRIPTIONS
590100	3071	3713001	0	429.0	468.7	TRUCK & BUS BODIES, NSK
590100	3071	371312	0	495.6	541.4	TRUCK BODIES NOT SOLD TO MOTOR VEHICLE MFGRS.
590100	3071	3713151	0	90.5	98.8	BUS BODIES NOT SOLD TO MOTOR VEHICLE MFGRS.
590100	3071	3713155	0	43.5	47.4	OTHER VEHICLE BODIES NOT SOLD TO MOTOR VEHICLE MFGRS.
590200	3071	3715001	0	17.5	19.3	TRUCK TRAILERS & CHASSIS, NSK
590200	3071	37151	0	1004.8	1093.0	TRAILERS W/AXLE RATING 10,000 LBS & OVER
590200	3071	37152	0	64.7	70.1	TRAILERS W/AXLE RATING UNDER 10,000 LBS
590301	3072	3711001	0	25.3	30.3	MOTOR VEHICLES, NSK.
590301	3071+3711001	1	23.5	24.7	24.7	IMPORTED MOTOR VEHICLES, NSK.
590301	3072	3711111	0	7422.6	9242.7	PASSENGER CARS, COMPLETE
590301	3072	3711111	1	567.9	704.6	IMPORTED PASSENGER CARS, COMPLETE NEW (CANADIAN)
590301	3072	3711112	1	198.5	286.3	IMPORTED PASSENGER CARS (OTHER FOREIGN)
590301	3071	37112	0	5909.0	7174.7	TRUCKS, TRUCK TRACTORS & CHASSIS
590301	3071	37112	1	333.6	370.2	IMPORTED TRUCKS, TRUCK TRACTORS & CHASSIS
590301	3071	37113	0	11.9	12.6	BUSES & FIRE DEPT. VEHICLES
590301	3071	37113	1	26.5	29.8	IMPORTED BUSES & FIRE DEPT. VEHICLES
TOTALS				16664.4	20214.6	
MARGINS:						
TRANSPORT				429.8		
TRADE				3120.4		
MARGIN TOTAL				3550.2		

Distribution

Allocations of motor vehicles to agriculture were based on information in the USDA survey report "Farm Production Expenditures for 1972." The methodology for the remaining allocations include the following.

Trucks, truck tractors, and chassis (37112) were first broken into major use categories based on data from the 1972 *Census of Transportation* "Truck Inventory and Use Survey" (TIUS) on truck miles traveled by size, class, and major use. These data were weighted by value of shipments of trucks by weight class matching the detail in the TIUS with the data from the 1972 *Census of Manufactures*. Data were adjusted to exclude allocations made to agriculture. The major use categories include forestry and lumbering, mining, construction, manufacturing, trade, for-hire trucking, and utilities services. The manufacturing allocation was further broken down using information on mileage traveled by principal products carried by trucks in TIUS. When more detailed allocations to I-0 industries were required in manufacturing and the other major use categories, they were based on employment of truck drivers and deliverymen by industry.

The methodology used to distribute truck bodies not sold to manufacturers (371312) and trailers with axle rating 10,000 lbs. and over (37151) is similar to that for trucks, except that information from the TIUS on truck miles traveled by major use class and by body type were used, weighted by the value of shipments by body type in corresponding detail from the 1972 *Census of Manufactures*.

Since there was no breakdown of body types, trailers under 10,000 lbs. (37152) were assumed to be distributed in the same manner as the larger trailers (37151).

Buses and fire department vehicles (37113) were assumed to include only buses, since in the I-0 study all fire department vehicles were purchased by governments. Buses and bus bodies (3713151) were prorated to industry according to their employment of bus drivers.

Other vehicle bodies (3713155) consist of ambulances and hearses. The split was made in proportion to the value of shipments of these complete vehicles from table 6A in the 1972 *Census of Manufactures*. Ambulances were sent to transportation (I-0 65) and hearses to personal services (I-0 72).

Passenger cars (3711111) going to agriculture came from the USDA *Farm Production Survey*, 1971. The remainder was prorated to all industries based on estimates of mileage traveled by business owned and personal autos used for business prepared for the current account analysis of auto usage in the 1972 I-0 study.

Commodity 60 - Aircraft and parts

\$2,045.3 million

Codes						
I-0	CAP	GOOD	PRODUCT	I	PRODUCER	PURCHASER
				M	VALUE	VALUE
				P		PRODUCT DESCRIPTIONS
600100	3073	37212	0	180.1	186.3	PERSONAL AND UTILITY AIRCRAFT
600100	3073+37212	1	85.5	85.5		IMPORTED PERSONAL AND UTILITY AIRCRAFT
600100	3073	37213	0	1542.2	1594.0	COMMERCIAL AIRCRAFT
600100	3073	37213	1	4.7	4.7	IMPORTED COMMERCIAL AIRCRAFT
600100	3073	3721451	0	55.0	56.8	NONMILITARY AIRCRAFT MODIFICATIONS AND CONVERSIONS
600200	3073	37245	0	112.0	117.0	AIRCRAFT ENGINES, MILITARY AND NON-MILITARY
600200	3073	3764099	0	1.0	1.0	MISC. RECEIPTS
TOTALS				1980.5	2045.3	
MARGINS:						
TRANSPORT				2.0		
TRADE				62.8		
MARGIN TOTAL				64.8		

Distribution

Personal and utility aircraft (37212) were broken into broad use categories with information from the 1972 FAA Statistical Handbook of Aviation, Tables 8.2 and 8.5, which give the number of general aviation aircraft by type of aircraft, its primary use, and the mileage flown by primary use. An allocation scheme was derived based on mileage flown by type of aircraft and by primary use and weighted by an average price per type of craft. Allocations to each use category were coded to selected I-O industries according to the type of activity involved. Further breakdowns to I-O industry detail was based on employment of airplane pilots in each industry.

Commercial aircraft (37213) were allocated on a use basis entirely to air transportation (I-O 65).

Modifications and conversions of aircraft (3721451) and aircraft engines (37245) were distributed to using industries in proportion to their allocations of aircraft.

Miscellaneous receipts (3764099) were determined to be for installation work and allocated entirely to transportation (I-O 65).

Commodity 61 - Other transportation equipment

\$7,050.1 million

Codes

I-O	CAP GOOD	PRODUCT	I M P	PRODUCER VALUE	PURCHASER VALUE	PRODUCT DESCRIPTIONS
610100	3074	37310	0	10.6	10.7	SHIP BUILDING & REPAIRING NSK.
610100	3074	37310	1	97.0	97.0	IMPORTED SHIP BUILDING & REPAIRING NSK.
610100	3074	3731112	0	261.9	263.4	NONPROPELLED SHIPS, NEW CONSTRUCTION, NONMILITARY
610100	3074	3731314	0	98.3	98.8	SELF-PROPELLED SHIPS, NON-MILITARY YACHTS
610100	3074	3731324	0	290.9	292.5	SELF-PROPELLED SHIPS, NON-MILITARY, CARGO & PASSENGER
610100	3074	3731327	0	124.8	125.5	TOWBOATS, TUGBOATS, TENDER VESSELS, FIREBOATS
610100	3074	3731653	0	65.4	65.7	CONVERSIONS OF NONMILITARY SHIPS
610100	3074	3731659	0	90.0	90.5	REPAIRS TO NONMILITARY SHIPS
610200	3074	37322	0	13.7	14.7	OUTBOARD MOTORBOATS, INCLUDING KITS
610200	3074	3732713	0	5.2	5.6	SAILBOATS
610200	3074	3732718	0	25.5	27.4	OTHER BOATS
610200	3074	3732718	1	4.8	5.6	IMPORTED OTHER BOATS
610200	3074	3732821	0	12.2	13.1	REPAIR OF NON-MILITARY BOATS
610200	3074	37329	0	44.3	47.6	INBOARD AND INBOARD OUTDRIVE MOTORBOATS
610300	3075	374311	0	443.4	462.3	NEW & REBUILT LOCOMOTIVES
610300	3075	374321	0	10.8	11.2	PASSENGER TRAIN CARS, NEW
610300	3075	374321	1	8.2	8.2	IMPORTED PASSENGER TRAIN CARS, NEW
610300	3075	374322	0	912.2	951.4	FREIGHT TRAIN CARS, NEW
610300	3075	3743313	0	61.5	64.3	OTHER CARS, EXCL, PASSENGER TRAIN AND FREIGHT
610300	3075	3743313	1	3.5	3.5	IMPORTED OTHER CARS, EXCL, PASSENGER TRAIN AND FREIGHT
610300	3075	3743340	0	51.8	54.0	REBUILT PASSENGER & FREIGHT CARS
610500	3090	3751213	0	2.9	3.2	MOTORCYCLES & TRAIL VEHICLES
610500	3090	3751213	1	42.9	45.7	IMPORTED MOTORCYCLES & TRAIL VEHICLES
610601	3090	37921	0	17.2	17.5	RECREATION TYPE TRAILERS
610601	3090	3792241	0	2.9	3.0	COLLAPSIBLE CAMPING AND TRAVEL TRAILERS
610602	2030	24511	0	3042.2	3964.6	MOBILE HOMES
610602	1025	24512	0	37.4	37.8	NONRESIDENTIAL MOBILE BUILDINGS
610700	3090	3799381	0	56.0	91.9	SELF PROPELLED GOLF CARTS & PERSONNEL CARRIERS
610700	3090	3799493	0	11.9	19.5	SELF PROPELLED SNOWMOBILES
610700	3090	3799493	1	7.7	9.1	IMPORTED SELF PROPELLED SNOWMOBILES
610700	3090	3799931	0	74.9	122.7	AUTOMOBILE TRAILERS
610700	3090	3799935	0	8.3	13.6	CHASSIS FOR AUTOMOBILE TRAILERS
610700	3090	3799991	0	4.5	7.4	BOAT TRAILERS
610700	3090	3799995	0	.7	1.1	ALL TERRAIN VEHICLES

TOTALS 5945.5 7050.1

MARGINS:

TRANSPORT 43.5
TRADE 1061.1

MARGIN TOTAL 1104.6

Distribution

An estimate based on information in the *Annual Report of the Maritime Administration for Fiscal Year 1973* allocated one percent of the total value of shipbuilding and repairing to construction (I-0 11) for oil and gas well drilling service. This estimate was deducted from product code 3731112 and the remainder was allocated to water transportation (I-0 65) on a use basis.

Self-propelled nonmilitary cargo and passenger ships (3731324) and towboats, tugboats, tender vessels and fireboats (3731327) were allocated entirely to water transportation (I-0 65) on a use basis.

Self-propelled nonmilitary yachts (3731314) were prorated to all industries, except construction and water transportation, based on their employment of sailors and deckhands.

The following product codes were prorated over the sum of the distribution of the other products comprising I-0 61.0100: shipbuilding, n.s.k. (37310), all other conversions (3731653), and all other repairs (3731659).

Boat building and repairing.--Outboard motor boats, including prefabricated kits (37322) and sailboats (3732713), were arbitrarily distributed 95 percent to amusement and recreation services (I-0 76) and five percent to the fishery products industry (I-0 3).

Other boats (3732718) were prorated to all industries employing sailors and deckhands.

The value for inboard and inboard-outdrive motorboats (37329) was allocated mainly to the commercial fishing industry (I-0 3), with small amounts going to water transportation (I-0 65), and amusements and recreation services (I-0 76). The allocation was based on merchant marine data for 1965 and 1968 on the number of boats classified by type of service.

Repair of nonmilitary boats (3732821) was allocated in proportion to the distribution of the other product codes in the 3732 group.

Railroad equipment.--All the product codes in the 374 group (i.e., locomotives, passenger train cars, freight cars, and freight trains) were allocated entirely to the railroad transportation industry (I-0 65) on the basis of use.

Other transportation equipment.--The value for motorcycles and trail vehicles (3751213) was allocated arbitrarily 60 percent to amusement and recreation services (I-0 76) and 40 percent to messenger service in miscellaneous business services (I-0 73).

Recreation trailers (37921) and collapsible camping and travel trailers (3792241) were allocated entirely to automotive services (I-0 75) for rental purposes.

Mobile homes (24511) were allocated entirely to the real estate industry (I-0 71) because of their residential usage.

Nonresidential mobile buildings (2451200) were allocated judgmentally to agriculture, mining, construction, utilities, and wholesale and retail trade. The allocations to the various mining industries were prorated over their 1972 capital expenditures for new equipment.

Self-propelled golf carts and personal carriers (37993881) were allocated judgmentally: three-fourths to amusements (I-0 76) for golf course use; 10 percent of the residual to transportation for rail and air terminal usage; and the remainder was prorated to manufacturing industries based on their employment of foremen.

Boat trailers (3799991) were split arbitrarily between amusement and recreation services (I-0 76) and to boatbuilding (I-0 61).

All-terrain vehicles (3799995) were allocated to amusement and recreation services (I-0 76).

Self-propelled snowmobiles (3799493) were allocated judgmentally, with most going to the amusement industry (I-0 76) for rental purposes and equal token amounts going to forestry products (I-0 3), logging camps (I-0 20), and ski lodges and resorts (I-0 72).

An arbitrary two percent of the automobile trailers, n.e.c. (3799931) was allocated to amusements and recreation services (I-0 76). The remainder was allocated to automobile services (I-0 75).

The entire value of chassis for automobile trailers (3799935) was arbitrarily allocated to trailer rentals, a part of automotive services (I-0 75).

Commodity 62 - Professional, scientific, controlling
instruments and supplies

\$2,544.5 million

Codes						
I-O	CAP GOOD	PRODUCT	I M P	PRODUCER VALUE	PURCHASER VALUE	PRODUCT DESCRIPTIONS
620100	3080	3811001	0	13.8	15.0	ENGINEERING AND SCIENTIFIC INSTRUMENTS, NSK
620100	3073	38111	0	207.9	226.8	AERONAUTICAL INSTRUMENTS
620100	3080	38112	0	106.2	115.6	LABORATORY AND SCIENTIFIC INSTR.
620100	3080	381130	0	18.3	19.9	SURVEYING & DRAFTING INSTRUMENTS
620100	3080	381130	1	3.5	4.0	IMPORTED SURVEYING & DRAFTING INSTRUMENTS
620100	3080	3811302	0	8.2	8.9	SURVEY/DRAFTING INSTR, LAB. FURNITURE, NSK
620100	3080	381138	0	77.3	84.2	LABORATORY FURNITURE
620200	3080	3820	0	-4.8	-5.0	UNDISTRIBUTED MECHANICAL MEASURING DEVICES
620200	3080	38230	0	88.1	94.4	ALL OTHER INDUSTRIAL PROCESS INSTRUMENTS
620200	3080	382303	0	21.2	22.7	ELECTRICAL AND PNEUMATIC PROCESS VARIABLE INSTRUMENTS
620200	3080	382304	0	20.6	22.0	TEMPERATURE INSTRUMENTS
620200	3080	382305	0	49.0	52.6	ELECTRICAL, MECHANICAL & PNEUMATIC TEMPERATURE INSTR.
620200	3080	3823058	0	23.3	24.9	PRIMARY TEMPERATURE SENSORS
620200	3080	382306	0	37.3	40.0	PRESSURE, VACUUM & DRAFT INSTR.
620200	3080	382307	0	48.3	51.8	FLOW AND LIQUID LEVEL PROCESS VARIABLE INSTR.
620200	3080	3823074	0	.3	.3	INDUSTRIAL HUMIDITY INSTR.
620200	3080	382308	0	44.4	47.7	CONTINUOUS PROCESS INSTR.
620200	3080	382422	0	70.5	74.4	GAS METERS
620200	3080	3824231	0	73.0	77.0	WATER METERS
620200	3080	3824241	0	4.2	4.5	GASOLINE DISPENSING METERS
620200	3080	3824298	0	16.0	16.9	OTHER LIQUID METERS
620200	3080	38243	0	10.0	10.6	COUNTING DEVICES
620200	3080	3829000	0	39.2	41.6	MEASURING & CONTROLLING DEVICES NEC, NSK
620200	3080	38292	0	18.9	20.0	PHYSICAL PROPERTIES TESTING EQUIPMENT
620200	3080	38294	0	151.1	160.3	NUCLEAR RADIATION, DETECTION AND MONITORING
620400	3080	3841001	0	36.7	50.5	SURGICAL & MEDICAL INSTR., NSK
620400	3080	3841001	1	1.1	1.2	IMPORTED SURGICAL & MEDICAL INSTR., NSK
620400	3080	3841012	0	55.4	72.9	SURGICAL INSTRUMENTS
620400	3080	3841031	0	14.2	18.6	ORTHOPEDIC INSTRUMENTS
620400	3080	3841051	0	102.6	135.2	DIAGNOSTIC APPARATUS
620400	3080	3841084	0	346.6	456.7	OTHER SURGICAL & MEDICAL INSTR.
620400	3080	3841092	0	125.5	165.4	OPERATING AND OTHER FURNITURE
620500	3080	3842100	0	3.4	4.7	SURGICAL, ORTHOPEDIC APPLIANCES, NSK
620500	3080	3842115	0	35.8	49.5	STERILIZERS, EXCLUDING DENTAL
620500	3080	3842165	0	26.5	36.7	BREATHING DEVICES, EXCLUDING ANESTHETIC APPARATUS
620500	3080	3842198	0	55.9	77.1	OTHER SURGICAL AND ORTHOPEDIC ITEMS
620600	3080	3843001	0	18.0	25.8	DENTAL EQUIPMENT & SUPPLIES, NSK
620600	3080	3843048	0	70.0	101.8	PROFESSIONAL DENTAL AND DENTAL LAB. EQUIPMENT
620600	3080	3843057	0	27.0	38.7	DENTAL HAND INSTRUMENTS
620600	3080	3843081	0	2.8	4.0	DENTAL STERILIZERS
620600	3080	3843098	0	51.3	73.5	OTHER DENTAL PRODUCTS, EXCLUDING X-RAY EQUIPMENT
620700	3080	3873120	0	1.0	1.1	SPRING WOUND AND WEIGHT OPERATED CLOCKS
TOTALS				2119.6	2544.5	
MARGINS:						
TRANSPORT				7.9		
TRADE				417.0		
MARGIN TOTAL				424.9		

Distribution

Aeronautical instruments and automatic pilots (38111) were prorated to all industries employing airplane pilots. Laboratory and scientific instruments (38112) and laboratory and scientific instruments (38112) and laboratory furniture (381138) were prorated to all industries employing biologists, chemists, physicists, life and physical scientists, clinical laboratory technologists and technicians, biology technicians, and chemical technicians. Surveying and drafting instruments (381130) were prorated to all industries employing draftsmen and surveyors.

The product codes for process instruments (i.e., sensors, meters, and testing equipment) were allocated to mining, construction, utilities, and selected manufacturing industries based on information published in the *1975 U.S. Industrial Outlook*, U.S. Department of Commerce, and from discussions with industry sources. Specific allocations to I-0 industries were made by prorating over their employment in one or more of the following occupations: mechanical engineering technicians, electrical and electronic engineering technicians, and chemical technicians. The following table shows each product code, the occupations used for prorating, and the industries receiving allocations.

Product codes	Occupations	I-0 industries receiving allocations
382303	Electrical and electronic engineering technicians	5,6,7,8,9,10,11,35, 36,14,16,24,27,28, 29,30,31,32,68
3823058	Mechanical engineering technicians	Same as product code 382303
38230, 382304, 382305, 382306, 382308, 3824231	Electrical and electronic engineering technicians and mechanical engineering technicians	Same as product code 382303
382307	Electrical and electronic engineering technicians and mechanical engineering technicians	Same as product code 382303 excluding I-0 11
3824298	Electrical and electronic engineering technicians and mechanical engineering technicians	8,11,35,36,14,16,24, 27,28,29,30,31,32,68
38	Electrical and electronic engineering technicians, mechanical engineering technicians, and chemical technicians	Same as product code 382303
382422	Chemical technicians	Same as product code 382303, plus I-0 77

The small amounts of industrial humidity instruments (3823074) were split equally among I-O industries 14, 16, and 24 (i.e., food, fabrics, and paper products, respectively). Gasoline dispensing meters (3824241) were allocated arbitrarily: two-thirds to petroleum refining (I-O 31) and one-third to petroleum and petroleum product wholesalers (I-O 69). Counting devices (38243) were only taxi meters and were allocated to transportation (I-O 65).

Nuclear radiation detection equipment (38294).--An estimate of nuclear radiation devices used for medical and biological purposes was derived from product detail on value of shipments in table 6A of the *1972 Census of Manufactures* and was allocated to medical services (I-O 77). An arbitrary 20 percent of the remainder of the product line was sent to utilities (I-O 68) and an arbitrary 12 percent was sent to I-O 77 for noncommercial educational, scientific, and research organizations. The remainder was allocated to selected industries on the basis of information on the number of licenses issued to users of radio isotopes as reported in a 1966 study done by the Atomic Industrial Forum, Inc. When it was necessary to split broad industrial categories into various two-digit I-O industries, data for 1972 on capital expenditures for new equipment were used.

Surgical instruments (3841012) and orthopedic instruments (3841031) were prorated to all industries on the basis of their employment of physicians, medical, and osteopathic. Diagnostic apparatus (3841051) and operating and other furniture (3841092) were prorated to industries on the basis of their employment of registered nurses and medical and osteopathic physicians. Other surgical and medical instruments (3841084) were prorated to industries on the basis of their employment of physicians, medical and osteopathic, and veterinarians.

Nondental sterilizers (3842115) were prorated to all industries on the basis of their employment of physicians, medical and osteopathic. Breathing devices, except anesthetic apparatus (3842165) and other surgical and orthopedic items (3842198) were allocated entirely to medical services (I-O 77).

All dental equipment and other clinical products (3843---) were allocated entirely to dental services in I-O 77.

The PDE allocation of spring wound and weight operated clocks (3873120) were divided equally among the 11 manufacturing industries with the largest capital expenditures for new equipment during 1972.

Codes

I-O	CAP GOOD	PRODUCT	I M P	PRODUCER VALUE	PURCHASER VALUE	PRODUCT DESCRIPTIONS
630100	3080	3832	0	-64.1	-78.8	UNDISTRIBUTED PHOTOGRAPHIC EQUIPMENT
630100	3080	38321	0	254.8	316.3	ANALYTICAL INSTRUMENTS, NON-OPTICAL
630100	3080	38321	1	4.8	5.5	IMPORTED ANALYTICAL INSTRUMENTS, NON-OPTICAL
630100	3080	383213	0	136.3	169.3	OPTICAL COMPONENTS, OTHER OPTICAL INSTRUMENTS
630100	3080	383213	1	2.5	2.9	IMPORTED OPTICAL COMPONENTS, OTHER OPTICAL INSTRUMENTS
630100	3080	3832132	0	1.5	1.9	BINOCULARS & OPTICAL ALIGNMENT INSTRUMENTS
630100	3080	3832132	1	5.7	6.5	IMPORTED BINOCULARS & OPTICAL ALIGNMENT INSTRUMENTS
630100	3080	3832135	0	45.9	56.9	OPTICAL TEST EQUIPMENT
630100	3080	3832135	1	5.5	6.4	IMPORTED OPTICAL TEST EQUIPMENT
630300	3080	3861	0	-75.5	-88.5	UNDISTRIBUTED OPTICAL INSTRUMENTS & LENSES
630300	3080	386111	0	14.9	19.8	STILL HAND TYPE CAMERAS
630300	3080	386111	1	16.6	17.9	IMPORTED STILL HAND TYPE CAMERAS
630300	3080	3861112	0	1.4	1.9	EXPOSURE METERS (EXCLUDING BUILT-IN)
630300	3080	3861112	1	1.8	2.0	IMPORTED EXPOSURE METERS (EXCLUDING BUILT-IN)
630300	3080	3861123	0	37.8	50.5	PROCESS AND OTHER STILL CAMERAS
630300	3080	386114	0	1.7	2.2	FLASH UNITS, EXCLUDING STUDIO AND BUILT-IN
630300	3080	3861145	0	.3	.4	STUDIO TYPE FLASH UNITS
630300	3080	3861145	1	17.7	19.1	IMPORTED STUDIO TYPE FLASH UNITS
630300	3080	3861162	0	12.5	16.7	SLIDE AND STRIP PROJECTORS
630300	3080	3861162	1	1.4	1.5	IMPORTED SLIDE AND STRIP PROJECTORS
630300	3080	3861169	0	21.7	28.9	OTHER STILL PROJECTORS
630300	3080	3861174	0	121.6	142.5	STILL COMMERCIAL EQUIPMENT AND ENLARGERS
630300	3080	3861174	1	9.2	9.9	IMPORTED STILL COMMERCIAL EQUIPMENT AND ENLARGERS
630300	3080	3861192	0	22.2	29.5	OTHER STILL PICTURE ACCESSORIES
630300	3080	38612	0	1243.7	1457.9	PHOTOCOPYING EQUIPMENT
630300	3080	3861301	1	7.3	7.9	IMPORTED MOTION PICTURE PROJECTORS
630300	3080	3861308	0	3.9	5.5	16 AND 8MM CAMERAS
630300	3080	3861308	1	5.1	5.5	IMPORTED 16 AND 8MM CAMERAS
630300	3080	3861327	0	23.7	31.6	16MM SOUND AND SILENT PROJECTORS
630300	3080	386134	0	11.1	14.9	8MM SOUND AND SILENT PROJECTORS
630300	3080	3861352	0	6.5	7.7	PROJECTION SCREENS
630300	3080	3861361	0	16.2	21.8	MOTION PICTURE PROCESSING EQUIPMENT
630300	3080	3861375	0	2.7	3.5	MOTION PICTURE EQUIPMENT PARTS AND ATTACHMENTS
630300	3080	386138	0	6.8	7.9	35MM CAMERAS AND PROJECTORS
630300	3080	3861398	0	5.5	6.4	ALL OTHER 35MM AND LARGER EQUIPMENT
630300	3080	38614	0	115.9	135.9	MICROFILMING AND BLUE-BROWN-WHITE PRINTING EQUIP.
630300	3080	38614	1	27.9	30.1	IMPORTED MICROFILMING & BLUE-BROWN-WHITE PRINTING EQUIP.
TOTALS				2074.5	2477.8	

MARGINS:
TRANSPORT 16.4
TRADE 386.9

MARGIN TOTAL 403.3

Distribution

Optical instruments were allocated based on product descriptions given in the *1972 Census of Manufactures* and the I-0 analysis. Telescopes (3832132) were sent entirely to health, education, and social services and nonprofit organizations (I-0 77). Codes 3832135 and 383213 consist of optical microscopes, various optical instruments, and related components. These have a wide range of laboratory uses, and hence were prorated on the basis of employment of selected life and physical scientists.

Analytical instruments (38321) were prorated on the basis of employment of chemists, since these instruments are mostly used in chemistry.

Still hand-type cameras, exposure meters, and flash units (386111, 386112, and 386114) were prorated to all industries on the basis of employment of photographers.

Product code 3861123 was split between process and studio cameras based on product detail on value of shipments in table 6A of the *1972 Census of Manufactures*. All process cameras were allocated to printing and publishing (I-O 26) while studio cameras plus studio flash units (3861145) were split between personal services and business services (I-O's 72 and 73) based on their employment of photographers.

Slide, strip, and still projectors and all 8- and 16-mm equipment (3861162, 3861169, 3861308, 3861327, 386134, 3861375) were allocated to broad use categories, based on expenditures for nontheatrical motion picture and audiovisual products, as published in the 1974-75 *Wolfman Report* on the photographic industry. A further split to the I-O industry level was based on another survey in the *Wolfman Report* giving a breakdown of the purposes for which audiovisuals are used in industry. These purposes include training, sales, advertising, and public relations. The amount for training was prorated on the basis of employment of personnel workers; that for sales and advertising was prorated on the basis of employment of salesmen and advertising agents; and the portion on the basis of employment of salesmen and advertising agents; and the portion for public relations was prorated on the basis of employment of public relations personnel.

Finishing equipment and enlargers (3861174) were prorated on the basis of employment of photographic process workers, while projection screens (3861352) were prorated on the basis of employment of projectionists.

The other photographic equipment has more specialized uses and was sent to selected industries. Other still-picture equipment (3861192) was split between printing and publishing, personal services and business services (I-O's 26, 72, and 73), based on the employment of photographers and photoprocess workers. Motion picture processing equipment (3861361) was split between TV use (I-O 67) and motion picture use (I-O 76), based on the employment of process workers, while 35mm and larger equipment (386138 and 3861398) were allocated to the same two industries based on employment of photographers and projectionists.

Photocopy equipment (38612) was prorated across industries based on their employment of secretaries, typists, stenographers, receptionists, bookkeepers, and office machine operators.

Product code 38614 was split between microfilming and blueprinting equipment, based on product detail for value of shipments in table 6A of the *1972 Census of Manufactures*. Microfilming equipment was distributed to broad user-categories based on information obtained from the National Micrographics Association. Within these broad categories, allocations were made to individual I-O's based on their employment of selected clerical workers. Blueprinting equipment was prorated to industries on the basis of their employment of draftsmen.

Codes						
I-O	CAP GOOD	PRODUCT	I M P	PRODUCER VALUE	PURCHASER VALUE	PRODUCT DESCRIPTIONS
640200	3090	39311	0	22.0	41.7	PIANOS
640200	3090	39311	1	3.3	3.4	IMPORTED PIANOS
640200	3090	3931211	0	11.3	12.6	PIPE & REED ORGANS
640200	3090	3931211	1	3.5	3.6	IMPORTED PIPE & REED ORGANS
640200	3090	3931251	0	23.2	25.8	ELECTRONIC ORGANS
640200	3090	3931251	1	1.6	1.7	IMPORTED ELECTRONIC ORGANS
640200	3090	3931400	1	10.8	11.5	OTHER IMPORTED STRING & ELECTRONIC INSTRUMENTS
640200	3090	3931410	0	7.9	14.5	WIND & PERCUSSION INSTRUMENTS
640200	3090	3931420	0	14.6	27.1	STRING AND ELECTRONIC INSTRUMENTS EXCEPT ORGANS
640200	3090	3931431	0	2.4	4.3	ACCESSORIES AND PARTS SOLD SEPARATELY
640400	3090	3949467	0	12.7	15.0	EXERCISING EQUIPMENT
640400	3090	394951	0	29.3	34.6	BILLIARD POOL TABLES AND SUPPLIES
640400	3090	3949525	0	14.6	17.2	BOWLING ALLEYS
640400	3090	3949528	0	34.2	40.4	BOWLING BALLS
640400	3090	3949529	0	114.7	135.4	BOWLING ALLEY PLAYING SUPPLIES
640400	3090	394953	0	6.6	7.7	TEAM SPORTS EQUIPMENT
640400	3090	3949551	0	1.6	1.9	SEWALK AND RINK ROLLER SKATES
640400	3090	3949555	0	.5	.6	ICE SKATES
640400	3090	3949571	0	1.8	2.1	SNOW SKIS
640400	3090	3949575	0	.9	1.0	WATER SKIS
640400	3090	394963	0	5.1	5.9	INSTITUTIONAL PLAYGROUND EQUIPMENT
641100	3090	3993099	0	36.5	36.5	MISC. RECEIPTS
641100	3090	3993111	0	270.3	355.2	LUMINOUS TUBING, FLUOR. AND INCAND. LAMPS
641200	3090	3999	0	26.3	33.3	MISCELLANEOUS PRODUCTS NEC
641200	3090	3999100	0	.3	.3	CHEMICAL FIRE EXTINGUISHING EQ, NSK
641200	3090	3999102	0	21.6	27.0	FIRE EXTINGUISHING EQUIPMENT EXCLUDING PARTS NEC
641200	3090	3999201	0	66.2	82.4	COIN-OP AMUSEMENT MACHINES
641200	3090	3999900	0	.5	.6	MISC FABRICATED PRODS, NSK
641200	3090	3999901	0	12.1	15.0	BARBER AND BEAUTY SHOP EQUIPMENT AND ACCESSORIES
641200	3090	3999906	0	9.3	11.5	BEAUTY AND BARBER SHOP CHAIRS
TOTALS				765.7	969.8	
MARGINS:						
TRANSPORT				33.4		
TRADE				170.7		
MARGIN TOTAL				204.1		

Distribution

The allocation of musical instruments other than organs (39311, 3931410, 3931420, 3931431) was based on a 1950 National Association of Music Merchants survey and follow-up discussions with the IRS, national accounts analysts, and the National Music Teachers Association. The purchaser categories listed in the survey were coded to I-0 industries by description, with all necessary splits being made on employment of musicians.

On advice from the National Association of Music Merchants, pipe and reed organs (3931211) were sent entirely to churches and schools (I-0 77) and electronic organs (3931251) were split between amusements (I-0's 76 and 77), based on employment of musicians.

Exercising equipment (3949467) was sent entirely to I-0 76, based on information provided by the Association of Physical Fitness Centers.

Billiard and bowling equipment and supplies (394951, 3949525, 3949528, 3949529) were prorated to selected industries based on their employment of recreation attendants.

Team sports equipment (394953) was split between amusements (I-0 76) and private education (I-0 77) based on information from a National Sporting Goods Association survey of gross sales to teams by sporting goods dealers in 1974. The survey shows sales to teams by sport and by type of institution. This information was supplemented by persons in the sporting goods field.

Institutional playground equipment (394963).--An estimate of purchases by private education was made based on information from a manufacturer of this equipment. The residual value was divided equally between other users such as shopping centers, motels, private recreation, and YMCA's in I-0 71, 72, 76, and 77, as no other information was available.

All other sports and recreation equipment (3949551, 3949555, 3949571, and 3949575) was allocated entirely to I-0 76 as the only likely user.

Electric signs and the associated installation receipts (3993111 and 3993099) were split between retail/commercial business (75 percent) and industrial companies (25 percent) according to an estimate by the Institute of Signage Research published by the *Signage Quarterly*, 1978, Volume 1, number 2. The distribution to I-0 industries was then made on the basis of expenditures for outdoor advertising developed for the 1972 I-0 table from information in a 1972 survey by the Outdoor Advertising Association.

Fire extinguishers (3999102) were prorated on the basis of value of PDE purchases of new buildings as determined in the capital flow analysis of I-0 commodity 11. Included in the prorate base were all nonresidential buildings and residential apartment buildings (1505, 1506, 1508, 1509, 1511-19). Miscellaneous fabricated products, n.s.k. (3999100) were split evenly among the three largest PDE purchasers of product code 3999102.

Coin-operated amusement machines (3999201) were prorated to I-0's 74 and 76, based on capital expenditures for new equipment published in the *1972 Census of Retail Trade* and the *1972 Census of Selected Service Industries*.

Barber and beauty shop equipment and the associated nsk products (3999901, 3999906, and 3999900) were sent entirely to personal services in I-0 72.

Commodity 66 - Communications, except radio and TV \$2,167.2 million

<u>Codes</u>						
I-0	CAP GOOD	PRODUCT	I M P	PRODUCER VALUE	PURCHASER VALUE	PRODUCT DESCRIPTIONS
660000	3062	4811014	0	2128.1	2128.1	TELEPHONE INSTALLATION CHARGES
660000	3062	4812016	0	39.1	39.1	TELEGRAPH INSTALLATION CHARGES
TOTALS				2167.2	2167.2	

Distribution

Telephone and telegraph installation charges (4811014 and 4812016) represent wages paid for installation of telephone and telegraph equipment and were allocated entirely to I-0 66.

Commodity 71 - Real estate and rental\$697.9 million

<u>Codes</u>						
I-O	CAP GOOD	PRODUCT	I M P	PRODUCER VALUE	PURCHASER VALUE	PRODUCT DESCRIPTIONS
710200	999	6509	0	697.9	697.9	DEALERS COMMISSIONS ON NEW STRUCTURES
TOTALS				697.9	697.9	

Distribution

Dealers' commissions (6509) on sales of new residential (farm and nonfarm) structures were allocated to the real estate and rental industry (I-0 71).

The commissions on sales of new nonresidential structures were also allocated to the real estate and rental industry although an unknown, but probably small, amount should be distributed to other industries, mainly trade, as purchases of structures built for speculation.

Commodity 72 - Personal and repair services\$191.5 million

<u>Codes</u>						
I-O	CAP GOOD	PRODUCT	I M P	PRODUCER VALUE	PURCHASER VALUE	PRODUCT DESCRIPTIONS
720200	3058	7623	0	191.5	191.5	REFRIGERATION & MISC. EQUIPMENT INSTALLATION
TOTALS				191.5	191.5	

Distribution

Receipts for installation of refrigeration and miscellaneous equipment (7623) were allocated in proportion to the allocations of related equipment. See I-0 commodity 52, product group 3585.

Commodity 80 - Noncomparable imports\$4.8 million

<u>Codes</u>						
I-O	CAP GOOD	PRODUCT	I M P	PRODUCER VALUE	PURCHASER VALUE	PRODUCT DESCRIPTIONS
800100	3090	800830	1	2.2	2.2	ENGINE REPAIR DONE ABROAD
800100	3040	800840	1	2.4	2.6	IMPORTED USED AGRICULTURAL TRACTORS
TOTALS				4.6	4.8	
MARGINS:						
TRANSPORT				.2		
TRADE				.0		
MARGIN TOTAL				.2		

Distribution

Engine repairs done abroad (80083) were allocated to transportation (I-0 65).

Imported used agricultural tractors (80084) were allocated to the other agricultural products industry (I-0 2).

Appendix B
Reconciliation of Gross Private Domestic Fixed Investment, 1972:
NIPA, Input-Output, and Capital Flows

To reconcile the published statistics on capital in the national income and product accounts (NIPA's) with those in the I-O and capital flow tables, it is first necessary to aggregate the latter two to the categories used in the NIPA. The NIPA/I-O differences are due to preliminary benchmark revisions to the NIPA's, as they were incorporated into the I-O tables. The differences between the GPDFI column in the I-O table and the column listing the row totals for the CFT are attributable to the exclusion of net sales of used equipment and structures and brokers' commissions on sale of existing (used) structures from the CFT.

Table 8.--Reconciliation of Gross Private Domestic Fixed Investment, 1972:
NIPA, Input-Output, and Capital Flow
(Millions of dollars)

	NIPA (published) ^{1/}	Bench- mark change	Input- output	Net sales of used equipment and struc- tures 2/	Capital flow
Producers' durable equipment ---	75,345	3,464	78,809	3,227	82,036
Furniture and fixtures -----	3,280	112	3,392	-34	3,358
Fabricated metal products ----	2,025	495	2,520	6	2,526
Engines and turbines -----	1,407	278	1,685	-----	1,685
Tractors -----	2,569	-260	2,309	-75	2,234
Agricultural machinery, except tractors -----	2,466	57	2,523	-3	2,520
Construction machinery -----	3,230	-148	3,082	-90	2,992
Mining and oilfield machinery-	800	104	904	-14	890
Metalworking machinery -----	3,188	1,028	4,216	-23	4,193
Special industry machinery, n.e.c. -----	4,127	408	4,535	5	4,540
General industrial equipment -	3,985	195	4,180	35	4,215
Office, computing, and accounting machinery -----	4,568	346	4,914	-42	4,872
Service industry machinery ---	2,702	84	2,786	-63	2,723
Electrical transmission, distribution, and industrial apparatus -----	3,635	50	3,685	-112	3,573
Communication equipment -----	6,595	239	6,834	-1	6,833
Electrical equipment, n.e.c. -	909	34	943	-----	943
Trucks, buses, and trailers --	10,285	-372	9,913	38	9,951
Passenger cars -----	7,570	-63	7,507	2,757	10,264
Aircraft -----	1,870	44	1,914	358	2,272
Ships and boats -----	1,051	51	1,102	56	1,158
Railroad equipment -----	1,906	-369	1,537	18	1,555
Instruments -----	4,211	587	4,798	-3	4,795
Miscellaneous equipment (other) -----	2,350	89	2,439	-31	2,408
Scrap -----	-445	-----	-445	445	-----
Residential (landlord durables) -----	1,061	475	1,536	-----	1,536
Private structures -----	103,488	2,634	106,122	-2,335	103,787
Nonresidential -----	42,543	-524	42,018	-5	42,013
Industrial buildings -----	4,676	-----	4,676	-----	4,676
Commercial buildings -----	13,683	-181	13,502	-----	13,502
Religious buildings -----	844	-----	844	-----	844
Educational buildings -----	968	-----	968	-----	968
Hospital and institutional buildings -----	3,172	-----	3,172	-----	3,172
Other buildings -----	914	-----	914	-----	914

Table 8.--Reconciliation of Gross Private Domestic Fixed Investment, 1972:
NIPA, Input-Output, and Capital Flow
(Millions of dollars)
- continued -

	NIPA (published) ^{1/}	Bench- mark change	Input- output	Net sales of used equipment and struc- tures ^{2/}	Capital flow
Private structures					
Nonresidential (con.)					
Railroads -----	359	-----	359	-----	359
Telephone and telegraph ---	3,235	-----	3,235	-----	3,235
Electric light and power --	6,992	-----	6,992	-----	6,992
Gas -----	1,615	-----	1,615	-----	1,615
Petroleum pipelines -----	284	-----	284	-----	284
Farm (nonresidential) -----	1,432	-----	1,432	-----	1,432
Mining exploration, shafts, and wells					
Petroleum and natural gas -----	2,749	-63	2,686	-----	2,686
Other -----	388	-5	383	-----	383
Other nonresidential structures -----	941	-----	941	-----	941
Brokers' commission -----	421	-192	229	-218	11
Net purchases of used structures -----	-130	-83	-213	213	-----
Residential -----	60,945	3,159	64,104	-2,330	61,774
1-unit structures -----	27,337	1,875	29,212	-----	29,212
2 or more units -----	17,247	769	18,016	-----	18,016
Mobile homes -----	4,049	-161	3,888	-----	3,888
Additions and alterations -	7,145	184	7,329	-----	7,329
Nonhousekeeping units -----	1,989	-----	1,989	-----	1,989
Farm residential -----	647	6	653	-----	653
Brokers' commissions -----	3,800	403	4,203	-3,516	687
Net purchases of used structures -----	-1,269	83	-1,186	1,186	-----
ADDENDUM:					
New construction -----	-----	-----	99,087	-----	99,087
Mobile structures -----	-----	-----	4,002	-----	4,002
Brokers' commissions -----	-----	-----	4,432	-3,734	698
Net purchases of used structures -----	-----	-----	-1,399	1,399	-----
TOTAL -----			106,122		103,787

^{1/} The National Income and Product Accounts of the U.S., 1929-74: Statistical Tables, tables 5.4 and 5.6.

^{2/} Negative figures represent net purchases of used structures and equipment and small differences are due to rounding.

Appendix C
Comparability with the 1967 Capital Flow Table

A number of changes have been introduced in the 1972 CFT that affects its comparability with the 1967 CFT. ^{1/} The changes relate to the 1976 benchmark revision to the NIPA's, which affected gross private domestic fixed investment (GPDFI), and to new features introduced into the 1972 CFT as a result of changes in the 1972 I-O table.

The benchmark revisions that affected the I-O allocations to GPDFI in 1972 are as follows:

1. Expenditures for access structures to solid mineral deposits, which were formerly treated as intermediate expenses, were capitalized in 1972, thus increasing the allocation from construction to GPDFI.
2. Interest costs on utility plants under construction were excluded from the value of construction-put-in-place, reducing the allocation from construction to GPDFI.
3. Statistical revisions were made to the value-put-in-place for other categories of construction.
4. The value of computers owned by manufacturers and leased to users was reduced to reflect manufacturers' costs rather than the selling price of the computer.
5. Consumers' durable equipment purchased by landlords was capitalized and, therefore, was shifted from personal consumption expenditures to producers' durable equipment.
6. Statistical revisions were made in the allocation of engines, turbines and passenger cars to capital formation.

Allocations to GPDFI from the following I-O commodity groups were affected by these revisions: ^{2/}

^{1/} The revised data for the 1967 I-O study and new features introduced into the 1972 I-O table have not been incorporated into the 1967 capital flow study. Partly because of this, a constant-dollar flow table for 1967 in 1972 dollars has not been prepared for comparison with the 1972 table, as was done for 1963 in the 1967 study.

^{2/} See BEA Staff Paper No. 29, *Revised Input-Output Tables for the United States: 1967*.

	Amount of change (Millions of dollars)
I-0 11 New construction -----	608
17 Miscellaneous textiles and floor coverings -----	18
22 Household furniture -----	41
32 Rubber and miscellaneous plastic products -----	1
43 Engines and turbines -----	-3
51 Office, computing, and accounting machinery -----	-511
54 Household appliances -----	461
56 Radio, TV, and communication equipment -----	29
59 Motor vehicles -----	240
65 Transportation -----	25
69 Wholesale and retail trade -----	163
80A Directly allocated imports -----	-49

Changes introduced into the 1972 I-0 table and their effect on comparability between the 1972 capital flow table and earlier tables are as follows:

1. The 1972 I-0 study is based on the 1972 SIC classification, whereas the 1967 study is based on the 1967 SIC. However, in a number of instances, the I-0 classification for 1972 was adjusted so that, at the two-digit I-0 level of detail, the changes in the 1972 SIC are relatively small and thus have little practical effect on comparability with the 1967 study.
2. There were some additional explicit redefinitions of industries introduced into the 1972 I-0 table:
 - a. Redefinition of rental receipts to the real estate and rental industry, I-0 71, affects only the allocation to users of new farm housing units. They are allocated to I-0 71 in 1972, whereas they were allocated to agriculture (I-0 1 and 2) in earlier tables. The capital flow treatment of other structures on a use basis rather than on an ownership basis was unchanged in 1972 and, therefore, treatment of the remaining structures was not affected by the redefinitions introduced into the 1972 use and make tables.
 - b. Redefinition to the utilities industry, I-0 68, of the receipts of industries from the sale of surplus electric power and the redefinition to trade, I-0 69, of manufacturing and mining receipts from the resale at wholesale of goods produced by others were minor and felt to have little impact on investment and, therefore, were not dealt with explicitly in the adjustments to the 1972 capital flow estimates.
3. The 1972 table changes the treatment of imports. Previously, imported finished capital goods were allocated directly from foreign trade, I-0 80, to GPDFI. In 1972, if there is a comparable domestic product, the imported commodity is added to the domestic production as part of the total supply allocated to GPDFI and to

using industries in the capital flow table. Therefore, while the 1967 table shows \$658.0 million of imported capital goods allocated directly to GPDFI from I-0 80, the 1972 table shows only \$5.0 million of noncomparable inputs allocated to GPDFI. 3/

4. Eating and drinking places were identified separately as I-0 74 in the 1972 CFT, whereas they were included in trade (I-0 69) in the 1967 CFT.
5. Due to the lack of an adequate statistical basis for providing a split between new construction and maintenance and repair construction, the construction industries (I-0 11 and 12) were combined for 1972, whereas the two industries were distinguished in the 1967 CFT.

There are some changes in methodology in constructing the 1972 CFT that could affect comparisons with the previous table. Particularly, the procedure to reconcile the initial estimates of the capital flows to using industry with estimates of total capital expenditures by using industry has been changed. (See section II-C of the main text of the article, "Reconciliation of estimates of capital flows and capital expenditures.")

3/ The tape containing the data underlying the capital flow study preserved the detail on comparable imports, even though the comparable imports were allocated to using industries in the same proportion as the domestic product.

Appendix D
Description of Magnetic Tape Containing Data on Transactions
in New Structures and Equipment by Industry, 1972
- 606 Product -

This tape contains supplementary data from the 1972 input-output study (see *Survey of Current Business*, April 1979, page 58). Explanations of the data's characteristics are presented after the table describing the logical record layout, while the technical characteristics of the tape are described on Standard Form 277.

Logical Record Layout

<u>Field</u>	<u>Position</u>		<u>Alignment</u>	<u>Fill</u>
A	1-6	I-O commodity code	Right	Zero
---	7-10	Blank	---	---
B	11-17	Product code	Left	Blank
---	18	Blank	---	---
C	19	Domestic (blank) or imported (1)	N.A.	N.A.
---	20	Blank	---	---
D	21-24	Capital good code	N.A.	Blank
---	25-26	Blank	---	---
E	27-28	I-O using industry	Right	Zero
---	29-30	Blank	---	---
F	31-40	Producers' value	Right	Zero

Margins

G	41-50	Rail margin	Right	Zero
H	51-60	Truck margin	Right	Zero
I	61-70	Water margin	Right	Zero
J	71-80	Air margin	Right	Zero
K	81-90	Wholesale margin	Right	Zero
L	91-100	Retail sales tax	Right	Zero
M	101-110	Retail margin (excluding taxes)	Right	Zero
N	111-120	Purchasers' value	Right	Zero

Procedures used^{1/}

O	121-130	Procedure 1	Right	Zero
P	131-140	Procedure 2	Right	Zero
Q	141-150	Procedure 3	Right	Zero
R	151-160	Procedure 4	Right	Zero
S	161-170	Procedure 5	Right	Zero
T	171-180	Procedure 6	Right	Zero
U	181-190	Procedure 7	Right	Zero
	191-192	Blank		

^{1/} See table 3.

The input-output (I-0) commodity codes here are a subset of those used in the 1972 I-0 study. The product codes usually are extensions of the associated SIC codes. The capital goods codes refer to the capital good classes used in the national income and product accounts (except that a blank indicates a margin and a "4000" is used for all types of landlord durables).

Field C flags imported goods with a "1"; domestically produced goods have a blank in this field.

The using industry (field E) corresponds to the two-digit I-0 classifications, except that "11" actually represents all construction (industries 11 and 12 together).

There are six margin commodities (I-0 65.0100, 65.0300, 65.0400, 65.0500, 69.0100, and 69.0200). Records with these commodity codes fields have blanks in fields B, C, and D and zeroes in fields G through U.

The tape is sorted in ascending order on the following keys: fields E, A, B, D, and C. The collating sequence in ascending order is: "0," "1," . . . "9," blank.

A negative value is indicated by the presence of a minus sign in the leading (high-order, leftmost) character position of the field.

The values in fields F through M sum to the purchasers' value in field N. Similarly, values in fields O through U sum to field N.

COMPUTER MAGNETIC TAPE FILE PROPERTIES

01. Completion Date Year: Month: Day:			02. Form Prepared By (Name and Phone) Maurice A. Schlak (202) 523-0963 Computer Systems and Services Division (BE-10)		03. Reel ID Number (Property Control No.)	
04. Recording Date Year: Month: Day:			05. File Identifier or Descriptive Title 1972 Transactions in New Structures and Equipment by Industry - Product Level		06. Short Title (External Label Name) BEA IED 80-001	
07. Source Unavailable Year: Month: Day:			08. Documentation Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Available (Enter Citation) Attached		09. File Position on Reel 1 of 1	
10. To Be Returned Yes <input type="checkbox"/> No <input type="checkbox"/> To Other Than The Sender			11. Submitting Organization & Address Interindustry Economics Division Bureau of Economic Analysis U.S. Department of Commerce Tower Building Washington, D.C. 20230		12. Receiving Organization & Address	
13. Due Back Date Year: Month: Day:						
14. Technical Contact(s) & Phone Number(s) Philip M. Ritz, Chief (202) 523-0683 Interindustry Economics Division (BE-51)						

RECORDING SYSTEM CHARACTERISTICS

EQUIPMENT MANUFACTURER AND MODEL	15. Processing Unit Honeywell 2050A		17. No. of Tracks			18. Parity		19. Density (BPI) 800 1600
	16. Tape Subsystem		7	9	Other	Odd	Even	
RECORDING SOFTWARE	20. Operating System, Release & Version OS/2000, Release 4		22. Internal File Identifier					
	21. Utility Program or Data Base Language OS 2000, Tape Utility							
23. Characters Set (Graphics) <input type="checkbox"/> ASCII <input type="checkbox"/> BCD <input type="checkbox"/> Other (Specify) <input checked="" type="checkbox"/> EBCDIC <input type="checkbox"/> FIELDATA <input type="checkbox"/> Non-Print Codes			24. Recorded Label (Internal Label) <input type="checkbox"/> Header <input type="checkbox"/> ANSI X 3.27 Standard <input type="checkbox"/> Other <input type="checkbox"/> Trailer <input type="checkbox"/> FIPS Standard <input type="checkbox"/> None					

FILE CHARACTERISTICS

NUMBER OF RECORDS	25. Physical 1,171		27. Record Type <input checked="" type="checkbox"/> Fixed Length <input type="checkbox"/> Other Than Fixed		28. Records/Block (Blocking Factor) 10	TYPE OF FILE ORGANIZATION (Check One Box) <input checked="" type="checkbox"/> One File One Reel <input type="checkbox"/> One File Multiple Reels <input type="checkbox"/> Multiple Files One Reel <input type="checkbox"/> Multiple Files Multiple Reels
	26. Logical 11,706					
RECORD LENGTH	30. Physical 1,920 <input type="checkbox"/> Bytes <input checked="" type="checkbox"/> Chars. <input type="checkbox"/> Words (Bits/Word)					
	31. Logical 192 <input type="checkbox"/> Bytes <input checked="" type="checkbox"/> Chars. <input type="checkbox"/> Words (Bits/Word)					

SUPPLEMENTAL INFORMATION

12. Use/Handling Constraints (Specify if Yes)	
es	No X
3. For Submitting Organization Use Item 24.--If "None" indicated, a tape mark follows last physical data record. If "Other" indicated, the header is an 80-character physical record with "1HDR" as the first four characters and the trailer is an 80-character physical record with "1EOF" as the first four characters. Item 25.--Last physical data record is extended, if necessary, to the length given by item 30, with hexadecimal 4A as the padding character.	

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